



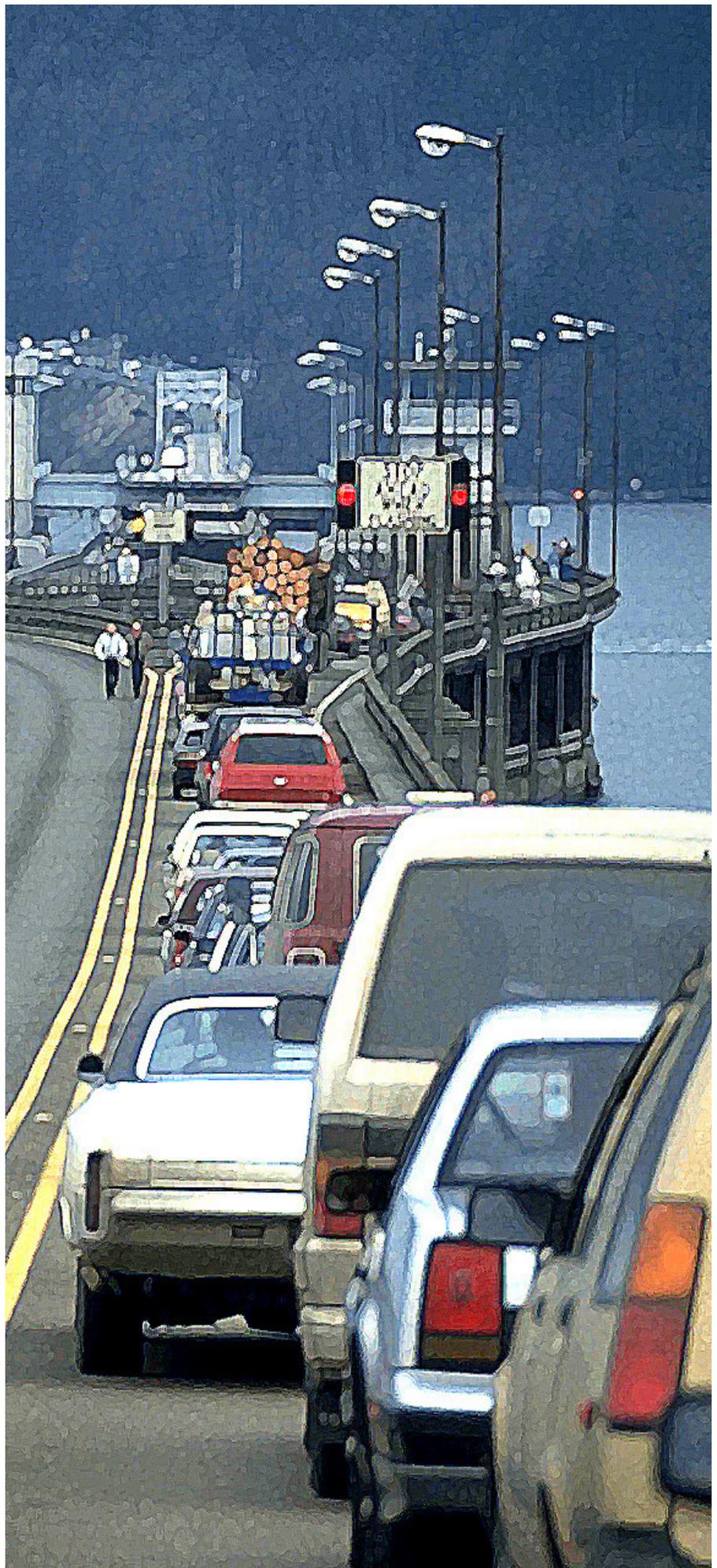
# Communication Strategies for State Transportation Research Programs

## **Volume I of IV: Why Worry About Communication?**

for the  
Ohio Department of Transportation  
Office of Research and Development  
and the  
Mid-Atlantic University  
Transportation Center

State Job Number: 14806(0)

**JUNE 2005**





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16. Abstract <p>Transportation research is often "open ended" and difficult to measure, in that its beneficiaries may not know how they have been served by research activities and results. This research project sought to 1) obtain feedback from Ohio Department of Transportation (ODOT) constituents, 2) develop a strategic communication plan that supports ODOT's overall mission and goals, keeping in mind research office resources, and 3) develop a communication template that other DOTs could model or use. To accomplish these objectives, existing knowledge, attitudes, and behaviors regarding Ohio DOT's research office were obtained through a number of surveys. Those surveyed included the Ohio general public, internal DOT constituents (technical liaisons, administrators and directors, district deputy directors, district research contacts, FHWA regional center directors) and external DOT constituents (consultants, contractors, transportation committee legislators, and college civil engineering department heads). In addition, a nationwide survey of DOT research office directors was conducted to determine the constituents with whom their offices communicate and the means by which they do so.</p> <p>Common areas of interest among constituents were identified, from which key research office messages were proposed, so they might be included in research office correspondence and publicity. Constituents' preferred methods of obtaining research office information also was explored. The study found that most research office directors believe they communicate well internally but do not communicate effectively to external audiences. It was found that part of this problem could lie in the underutilization of communication office personnel, who have the training and contacts to spread the word about transportation research.</p>		
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# Chapter 1:

## The Problem, Objectives, and Results

### 1.1 Project summary

The Ohio Department of Transportation Research Office serves not only the citizens of Ohio but also contributes to the federal highway system. Traditionally, however, contributions and accomplishments have remained relatively unknown. Because federal and state program accountability and perceptions among legislators and taxpayers are important components of strategic 21<sup>st</sup> century public affairs, a communication plan to help disseminate information to Research Office constituents is needed.

Government budget and staff constraints prohibit the types of sophisticated public relations activities often pursued by private industry. Therefore, the Research Office communication plan must be practical and realistic, using existing staff resources.

To develop an effective plan, the following internal and external Research Office constituents were surveyed to gauge their existing knowledge about, attitudes toward, and associations with the office:

- Ohio general public
- Other state DOT Research Office directors
- ODOT deputy directors and administrators
- ODOT technical liaisons
- ODOT district research contacts
- Ohio transportation committee legislators
- FHWA regional Resource Center directors
- Ohio college and university civil engineering department chairs
- District representatives of the Ohio County Engineers Association
- Ohio Contractors Association officers

In addition, a basic communication audit was conducted that reviewed the DOT publication Transcript and Research Office newsletter Moving Forward, the DOT and Research Office Web sites, and a basic content analysis of general transportation-related newspaper articles identified during the study period. (Complete survey and communication results are contained in this report.)

Relevant research findings were incorporated into the communication plan. Resultant strategies included identifying a consistent key message/benefit slogan that helps support the Research Office and DOT's overall goals and mission, as well as offering recommendations regarding promotional story lines and other opportunities to enhance two-way communication and build positive relationships with internal and external constituents.

Recommended assessment strategies of this year-long plan are also noted, and include tracking of Research Office-related publicity, correspondence, Web site activity, materials dissemination, and a readership survey. Following a year-long assessment process, it is recommended that the plan be reviewed and largely continued for a second year, especially given the commonly used quarterly nature of formal government planning and communication.

Given additional resources, a more sophisticated plan could be researched and developed at the end of year two to help meet more specific political, social, or organizational goals. In addition, it is suggested that the Research Office incorporate a communications component into its request for proposals to help ensure visibility and to help better market research products.

## 1.2 Problem statement

The Ohio DOT Research Office provides department-wide coordination of research activities, support to decision makers, solutions to special problems, technology transfer, and other services to the various offices within the agency and for numerous constituents of Ohio's transportation systems. Inherently, transportation research is often "open ended" and difficult to measure, in that its beneficiaries may not know how—or to what degree—they have been served by research activities and results. This is particularly true for the ultimate customers, namely, the transportation system users. To best serve these and other constituents, not only should they be informed of research activities, but the transportation programs themselves should be guided by an understanding of their needs and the degree to which these needs are being served.

## 1.3 Background

According to the NCHRP Synthesis 280, "... a strong focus on the customer and customer needs are at the heart of the [marketing] process. Marketing needs to be seen by both top management and research management as a vital part of the research function" (p. 3). The tools of public relations provide a means by which constituents may become both aware of and involved in the success of the research program. Modern public relations practice revolves around building and maintaining positive relationships with an organization's constituents and stakeholders through tailored messages and activities designed to educate, influence attitudes, and/or motivate specific behaviors. The audience-driven messages and strategies developed to achieve these ends depend on the organization's specific priorities, goals, and objectives.

The Office of Research and Development was recently restructured, with the ultimate goal of establishing a robust program that is responsive to the needs of its constituents. Establishing an effective way to communicate the results of the department's research efforts and market the research program has been identified as critical to achieving its goals.

Today, many government agencies, including some state DOTs, have acknowledged the importance of enhanced customer communications and relationships. For example, in a paper presented at the 2000 Annual Meeting of the Transportation Research Board, titled "State of the Practice: White Paper on Public Involvement," involvement was defined as the "process of two-way communication between citizens and government by which transportation agencies and other officials give notice and information to the public and use public input as a factor in decision making." The paper concludes in its "vision for the next decade" that "public involvement programs should become a routine part of the development of all transportation policy—not just project-specific, but routinely and seamlessly incorporated into the way transportation agencies do business."

As such, research activities too could be stronger and more visible with constituency input. California's Caltrans also has incorporated this philosophy. It lists as one of its guiding principles "involve the customer." According to its Web site, "The Research Program is customer-oriented from conception through implementation."

NCHRP Synthesis 280 (1999), titled Seven Keys to Building a Robust Research Program, synthesized information from an extensive literature search along with the viewpoints of selected DOT research managers, transportation agency and industry administrators, and academics regarding characteristics of robust research programs. A robust program was defined as one that flourished and thrived, was vital and enduring, and supported the overall performance necessary to build and maintain such a program. In addition, it specified marketing boldly as a key to a robust research program.

This process, says the report, involves internal and external communication efforts throughout the entire research process—from the identification of research needs to the implementation of research

results. A strong focus on the customer and customer needs is seen as critical to the success of these communications/marketing efforts. However, while the report identified basic success elements and noted some examples of good marketing efforts, it did not provide a detailed communications/marketing program or plan that a state DOT research office might implement.

#### **1.4 Objectives**

This study's objectives were as follows:

1. Seek out and obtain feedback from DOT constituents (i.e., other state Research Offices, traveling public, political entities, researchers, contractors, other DOT offices) to ultimately enhance their awareness of and communication with the Research Office.
2. Develop an efficient, resource-appropriate strategic communication plan based on high-quality data that can be readily implemented within the existing DOT organizational structure and that supports ODOT's overall mission and goals.
3. Develop a strategic communication template that can be adapted for use by other state DOTs.

#### **1.5 Method**

This project involved 12 separate surveys, conducted between September 2002 and October 2003, to internal and external ODOT constituents. Internal constituents consisted of the following groups:

- ODOT administrators/directors who are largely involved in the research program (determined by division)
- ODOT administrators/directors who are not largely involved in the research program (determined by division)
- ODOT Technical Liaisons
- ODOT District Deputy Directors
- ODOT District Research Contacts

External constituents consisted of the following groups:

- Ohio Residents
- Other state DOT Research Offices
- Ohio College Civil Engineering Department Chairs
- Ohio Legislators serving on transportation-related committees
- FHWA Regional Resource Center Directors
- Ohio Contractors Association Officers
- Ohio County Engineers Association Officers

All surveys were reviewed and pre-approved by the project's technical liaison, Monique Evans, and both project PIs. The large external constituent surveys (Ohio residents and other state DOT research offices) were also pre-tested, using a 10% random sample to identify possible problem questions and adjust them accordingly. At least two follow-up contacts were made for e-mailed and faxed surveys to try to increase response rates; the mailed surveys contained self-addressed, postage-paid envelopes.

Survey response rates and survey dates are provided in the key summary findings pages for each survey. The key summary findings precede each survey instrument and detailed results for each question asked.

#### **1.6 Results and recommendations**

The results of this research (presented in summary format and in detail in the following sections) helped produce a picture of how DOTs nationwide are engaging and serving constituents while offering a comprehensive examination of Ohio constituencies and their perceptions regarding transportation research. As a result, a communication plan was developed (also presented in the following sections) that will benefit not only the Ohio DOT but will also provide a communications model that other state

DOTs can emulate. Such visibility for research programs, and by extension, DOTs in general, can only enhance positive public perception toward the agencies and their work. These positive perceptions also affect legislative perceptions and current and potential DOT employees. It is suggested that the plan be continued and refined each year and that each ODOT-sponsored research project include a communications component as part of the proposal to help ensure project visibility and to better market research products.

This research united transportation engineering and public relations expertise to assess, establish and recommend communication mechanisms that better inform—and thereby better serve—transportation research constituents. In addition, the information gathered from this study allowed for the development of a comprehensive two-way communication strategy that makes efficient and effective use of communication resources and increases constituents' awareness of the research contributions to ODOT's mission to provide a world-class transportation system. Such visibility can only enhance positive public perception toward the agency and its work.

## Chapter 2:

### ODOT Research Office Communication Plan

#### 2.1 Background/Situation analysis

The Ohio DOT Research Office provides department-wide coordination of research activities, support to decision makers, solutions to special problems, technology transfer, and other services to the various offices within the agency and for numerous constituents of Ohio's transportation systems. However, its beneficiaries may not know how they are served by research activities and results.

In an era of shrinking resources and increased accountability, those responsible for research funds at the federal level recognize the importance of focusing on its various customers and their needs in order to better market the research function.

A synthesis study by the National Cooperative Highway Research Program (NCHRP) entitled "Seven Keys to Building a Robust Research Program" identified the need to "market boldly" as state DOT research offices seek to increase both their effectiveness and relevance. Research offices have a good story to tell and have a valuable "product," but many outputs seem to go unnoticed or under-utilized because of a lack of awareness. More importantly, the mission of research itself may be compromised to a degree because of a lack of "two way" communication with key constituents.

ODOT has publicly stated its vision to keep decision making closest to the customer and to provide an open environment where information is freely shared. Derived from this vision are ODOT's 2003 values, including a customer focus that states "understanding and meeting the needs of our customer." Two highly relevant ODOT goals may be derived from these values:

- 1) To understand thoroughly the diverse transportation needs of our customers;
- 2) To communicate effectively with internal and external customers.

The Research Office appreciates ODOT's vision, values and goals and builds upon the organization's overall mission to help enhance the quality of life in Ohio. As a state with the ninth largest highway network in the U.S., its importance to that mission cannot be overstated. ODOT's Research Office mission is "to develop and manage a robust annual research program that is responsive to the department's strategic initiatives; rooted in economics; takes advantage of emerging technologies; provides information and technology for management policy decisions; provides mechanisms to share research results with customers; and produces practical results that have a strong possibility of being implemented." The following communications plan will help the Research Office further provide information for its many internal and external constituents.

#### 2.2 Defining communication opportunities

To communicate effectively and to develop positive working relationships with ODOT Research Office constituents, a study of the complete communication sphere in which the Research Office operates is needed. This sphere includes: research-related publicity, impressions of internal and external constituents, and the experience of other states. Such a study serves as a foundation for a basic communication plan that can be folded into the ongoing Research Office activities to help communicate and "market" ODOT Research Office outcomes and hence, contribute visibly to ODOT's focus on the customer.

#### 2.3 Communication plan research goals

- 1) To ascertain knowledge of, attitudes toward, and interest in ODOT Research Office activities,

- 2) To gain insights into other Research Office practices,
- 3) To provide a working document of formalized procedures and activities that will guide research office personnel in applying proper communication strategies toward accomplishing its mission.

## 2.4 Research strategies

A number of activities were undertaken to gain information for the ensuing communication plan. These included a basic content analysis of editorial tone (positive, negative, or neutral) of general ODOT articles and surveys of the following external and internal constituents:

### External ODOT Constituents

- General public (random sample of Ohio adults)
- Legislators on transportation-related committees
- Members of the Ohio Contractors Association
- FHWA Regional Resource Center directors
- Ohio college and university civil engineering department chairs or directors
- District representatives of the County Engineers Association
- Other State DOT Research Office Directors

### Internal ODOT Constituents

- ODOT deputy directors and administrators with opportunity to be actively involved with the research office
- ODOT deputy directors and administrators with little opportunity to be actively involved with the research office
- ODOT district research contacts
- ODOT district deputy directors
- ODOT technical liaisons

## 2.5 Research results

A number of relevant findings were obtained that guide the essence of the communication activities plan for the ODOT Research Office. (Complete survey results are included in subsequent volumes of this report.)

### 2.5.1 General public survey

The general public's issue of greatest concern regarding Ohio's highways is safety, with 33% of respondents noting this issue. The next most frequently reported areas of concern were ongoing construction, road repair needs, and road congestion each being cited by 15% of respondents. The reliability of this information is validated by the Fall 2002 Access Ohio Statewide Survey, which also ranked congestion, safety, and highway maintenance as the most important transportation issues.

Communications professionals know that audiences are largely motivated to attend to messages based upon the perceived benefits their expended time and energy will reap. The good news is that the public, in general, has a high regard for research and a desire to know about it. In this study's general public survey, 92% of survey respondents believed that research was important to solving transportation problems, and 81% reported they were very or somewhat interested in knowing how research is addressing transportation issues. However, the survey also revealed that an overwhelming majority (more than 80%) did not know that ODOT had a research program and had not heard any news about Ohio transportation research. Those who had heard of ODOT research reported hearing of it through newspapers or the local news broadcast, and the majority of respondents perceived these story/ies as being positive in tone.

It is important to continue to use newspapers and local news broadcasts to reach the Ohio public. Newspapers are generally read by higher educated audiences who are often involved in the community, own businesses, are likely to vote, and are opinion leaders. Television is the primary means in which most Ohioans reported getting their news overall, and local news viewership is generally composed of middle aged and older viewers—again, as with newspapers, those more likely to be aware of local issues and to act upon them.

Although there is overlap in the readership and viewership of Ohio newspapers and local news stations, these media have specific strengths and needs. Newspaper reporters can easily cover more complicated or complex subjects, but still need photographs or graphics to complete the package; broadcast stations need short sound “bites” of clear, simple sentences and visuals for the viewers. The same story can be pitched to both media, but one must be aware of and respond accordingly to the requirements of each.

### 2.5.2 Content analysis

A Nexis database search of articles appearing in the press during the period of this study (August 2002 through December 2003) revealed a number of Ohio transportation-related articles (not including routine announcements, such as construction closings or public meetings), but only one regarding research. A simple content analysis of editorial tone was conducted, by which each article was read and determined by the researcher to have an editorial tone that was mostly positive, negative, or neutral toward the DOT. The research article was positive in tone; overall, other ODOT articles were predominantly negative in nature (55%), followed by neutral stories (25%), with a minority of stories (20%) being positive. (Note: If an article included both positive and negative elements of perceived equal proportions, it was assessed to be neutral. A separate accounting of the content analysis process and communication audit are included in Appendices A and B.)

Because of the small number of research-oriented stories, searches were conducted for other transportation research-related stories around the country. These stories were mostly positive or neutral in tone.

It is not surprising that most DOT-related news stories were largely negative in tone, given the nature of news itself. Also, research is often viewed positively in our society, given that many equate research with progress and problem-solving. Citizens are aware that technology, scientific studies, and other research activities are responsible for many of the comforts, conveniences, and necessities of everyday life. In short, research-oriented stories that demonstrate a clear benefit to residents are effective ways to help garner positive publicity for not only the research office, but for ODOT overall. However, the media do not come looking for good news stories; it is up to the DOT to make them aware of such activities.

The expressed interest in research among Ohio residents should be communicated to ODOT management, public information officials, and subsequently incorporated into ODOT communication strategies to reach the media and the audiences they serve. Appreciation of and support for a strategic communication plan by top management is critical for any organization. ODOT has already demonstrated a commitment to strategic communications planning with the development of its annual Communication Strategy. Key aims of previous department-wide strategies include *becoming more accessible to core external constituencies and more respected for the services provided*. Providing additional opportunities for two-way communication with the Research Office and receiving media attention for research activities are ripe opportunities to help fulfill these department-wide aims.

### 2.5.3 Other external constituents findings

Responses range from a low of 50% (of responding civil engineering departments) to 100% (of responding FHWA Resource Center regional offices) of external constituents reporting interest in ODOT research program activities. Most respondents are interested in research activities because

- 1) they want to extend knowledge in their fields and
- 2) they want to solve technical problems.

Overall, they believe that *solving problems for ODOT constituents*, *servicing as a technical resource*, *seeking ways to improve ODOT activities*, and *compiling best practices* from others should be Research Office priorities.

Respondents were most aware of the following research projects: SHRP Pavement Project on Delaware 23, the Evaluation of Warranty Provision on ODOT Construction Practices, and Innovative Bridge Design Construction Techniques to Expedite Construction. They had primarily heard of these projects through *Transcript*, conferences, and the media (newspapers). However, responding Ohio legislators had not heard of the Delaware 23 project. They learned of the few projects they had heard of through the media and legislative hearings.

Most other external constituents seem to learn of overall research office activities through the Web page and conferences (OTEC, County Engineers Association). They indicated they would prefer to learn of research office activities through *Transcript*, *Moving Forward*, e-mail, conferences, and the Web page. Legislators most preferred personal e-mail and colleagues as ways to stay informed.

Activities of greatest interest to the majority of all of these constituents include *best practices*, *technical innovations*, *ODOT success stories* and *cost-saving measures*. As might be expected, civil engineering department chairs also express interest in RFPs, while contractors and county engineers expressed interest in training opportunities, thus providing an outreach opportunity for Ohio's LTAP.

#### 2.5.4 Internal constituents

Regarding involvement in the research program, group responses range from a low of 40% of those at least somewhat involved (district deputy directors and not as involved administrators and directors) to 92% (technical liaisons) of those indicating they were at least somewhat involved in the program. The majority reported their motivation for involvement was

- 1) to provide solutions to technical problems and
- 2) to extend their knowledge of the field—the same two motivations most often cited by external constituents.

The main reasons for lack of involvement included time and research *not being part of their job duties*.

The majority of respondents noted that they least liked the slow implementation of research projects, but that their involvement with the research program has *enhanced their professional development* through *increased knowledge and contacts*. The vast majority of internal respondents believe that the number one priority for the research program should be to *seek out ways to improve ODOT activities*. Also ranking highly among respondents were *solving problems for constituents*, *compiling best practices*, and *servicing as a technical resource*—again, the same top priorities as external constituent respondents.

These topics of expressed interest (how Research Office activities have *improved ODOT activities*, *solved problems for constituents*, and *how it serves as a technical resource* and *communicates best practices*) therefore are guidelines for selecting materials to publish and present to these audiences.

Internal constituents reported they primarily learn of research program activities through colleagues, *Transcript*, conferences, and interoffice communication/letters. Overall, they reported they would prefer to learn of research activities through *Transcript*, conferences, brief reports, Web page, *Moving Forward*, and e-mail—again, the same methods (except for the reports) noted by external constituents.

Based upon the discrepancy between how respondents indicate they receive information and how they

prefer to receive it, it seems that perhaps a number of both internal and external constituents are either 1) not aware of *Moving Forward*, but would like to learn of research program activities through the “Moving Forward research newsletter” or 2) believe they are not receiving the types of information they desire via this medium. Therefore, a concerted effort should be undertaken to include clearly labeled (through consistent column/page and insert design and designation) article topics of constituent interest and activities that are aligned with audience’s perceived office priorities (i.e., how Research Office activities have *improved ODOT activities, solved problems for constituents*, and how it *serves as a technical resource, communicating best practices* by telling of technical innovations and cost-saving measures). A concerted effort should also be made to reach out to constituents to announce the latest issues of /offer electronic versions of *Moving Forward* and its inserts.

Regarding meeting expectations, respondent groups reported a low of 40% (not as involved administrators/directors) that the research office at least sometimes meets their expectations to a high of 100% (district deputy directors) that the research office meets their expectations. The vast majority of respondents indicate that the research office is accessible (easy to reach, responsive). However, *most did not feel as though they were part of the office’s strategic planning process; results were mixed regarding input into the program at the project level.*

If indeed more constituent input is sought for these Research Office activities, this needs to be communicated and demonstrated to help build positive relationships and interest/buy-in/recognition of the program. Regarding perceived limitations of the Research Office, respondents indicated the *risk of no payoff* from research as being the most significant limitation. This, coupled with perceived bureaucracy and time investment, could discourage participation and instill negative perceptions and attitudes toward research office activities. Therefore, again, messages should explicitly discuss the payoff, the successes, the benefits/solutions to ODOT problems. It should be communicated in ways audiences can easily understand, e.g., not reporting that a given research project has resulted in a “stronger pavement” but the more explicit “it adds six years to pavement life, saving money and extending quality roads.”

Respondents were most aware of the following research projects: SHRP Pavement Project on Delaware 23, the Ohio Freight Study, Evaluation of Warranty Provisions on ODOT Construction Practices, and Innovative Bridge Design Construction Techniques to Expedite Construction—the same topics, although to a larger degree, that the external constituents surveyed. They primarily heard of these projects through *Transcript*, conferences, IOC/letters, and colleagues. They also equated these projects, among others, to better materials, better methods, quality improvement, and cost savings.

Overall, internal constituents indicated being interested in *Ohio’s success stories, best practices of others, technical innovations*, and *implementation*—the same primary issues (with the exception of implementation) that external constituents expressed interest in.

Internal and external Research Office constituents (with the exception of the general public) have common views regarding Research Office priorities, their motivations for involvement, their activity interests, and their preferred mechanisms for communication. These similarities make communication efforts easier and more efficient in terms of supplying key messages and media for these groups.

#### 2.5.5 Other state DOT research offices

In developing a communication plan template, some background is helpful in order to sufficiently understand the nature of other state DOT research office’s communication activities and strategies. (Complete results are included in volume III of this report.) This is because they have similar missions, operate under similar constraints, and serve similar internal and external constituents. Some key findings regarding the development of a plan follow: The highest rated primary mission identified by respondents overall was to “identify and solve problems internally.” This corresponded to the number one priority

voiced by external ODOT constituents for the research program and it ranked highly among internal constituent respondents as well.

Solving problems is a primary expectation for and of research programs; therefore, key messages should focus on this aspect of the program's work. In fact, one responding state DOT Research Office indicated that "solving problems" was its key message to constituents.

The majority of respondents (55%) report that no FTEs focus on marketing their respective research programs. The most reported communication contacts are with universities (the lowest level of interest in research activities overall was indicated by university civil engineering department chairs in the ODOT constituency surveys), other DOTs, and internal division offices. Most also report communicating regularly with district/regional offices and with consultants. (Note that this was a group some ODOT constituents suggested might be interested in Research Office activities.) However, fewer than half the respondents communicated regularly with contractor associations (a group that expressed strong interest in the ODOT program), the general public (an audience that indicated an interest in Ohio), or others (e.g., FHWA, LTAP, legislators, other governmental or technical agencies).

The primary communication tools used by DOT research offices nationwide to communicate across constituents were *newsletters*, *Web sites*, and *meetings*. The majority report that they present research project results at conferences or trade shows and that they require their P.I.s to acknowledge their office in publications and presentations. However, fewer than half of the DOTs reported they have research office exhibits at conferences, which provide opportunities for powerful interpersonal connection and was one of the most often cited sources of ODOT Research Office information, according to constituent survey respondents. About one in four reported that they have developed a communications or marketing plan and have dedicated communications/marketing budgets, which seem to be primarily dedicated to printing the newsletter and other publications, exhibits, and travel. Perhaps most surprising is that less than a third of state research offices communicate regularly with their DOT communication office, the unit that houses professional communicators who have already built relationships with media representatives, DOT opinion leaders, and other public information officers.

The DOT communication office should be contacted and made aware of the desire for strategic research office communication activities, among them the development of a consistent tag line, slogan or key benefit message that should be incorporated into all research office communication media (e.g., newsletters, Web sites, brochures, exhibits). Such repetition and message consistency helps enhance retention of key messages and helps build the desired image or "brand" of the research office. Interpersonal communication opportunities, such as meetings and conferences, should be used whenever possible to reiterate research office key benefit messages and to obtain the feedback from constituents necessary to help build positive relationships with them.

## **2.6 ODOT Research Office communication goals**

- 1) *Make public, internal and external constituents aware of Research Office activities and their associated benefits.* It is anticipated that the ultimate result of such exposure will be an increase in positive attitudes toward ODOT and transportation research and to help spur adoption of innovative technologies among others.
- 2) *Help the Research Office fulfill its mission through feedback and mutually beneficial constituent relationships.*

## **2.7 Communication objectives (first year)**

1. To increase the awareness of ODOT research office activities and their benefits to the general public by the end of the first quarter.

2. To increase awareness of ODOT internal constituents regarding Research Office activities to improve ODOT practices by the end of the first quarter.
3. To increase awareness of ODOT external constituents regarding research office benefits to them by the end of the first quarter.
4. To take a leadership role in information transfer to spread knowledge about best practices and facilitate information transfer (two-way communication) with constituents by the end of the fourth quarter.

Note that these activities will inherently increase positive attitudes toward ODOT. However, without resources for a probability-based follow-up survey, attitude cannot be assessed, only inferred by awareness activities, such as the amount of positive press coverage received. Also, these objectives would ideally include specific percentage gains to be achieved in awareness, positive attitudes, and behaviors/actions. However, without additional surveys of initial respondents, specific assessments cannot be made, but indicators can be used and are specified in the plan assessment sections below.

Also, although the above objectives will be assessed according to the dates specified, assessment will be ongoing, so early success indicators can be gauged and plans adjusted accordingly, as needed. Adaptation and continuation of the communication plan should proceed into a second year to build upon the seeds sown in year one. Ideally, a full assessment of the plan would occur at the end of year two, including additional content analyses of media coverage to include not only article tone but also existence of key message points, as well as targeted follow-up surveys of the general public and other select Research Office audiences.

Communication plans should become part of the Research Office's annual strategic planning activities. The following strategies and tactics are recommended to accomplish each objective, reiterated again below:

2.7.1 Objective 1: To increase the awareness of ODOT Research Office activities and their benefits to the general public by end of the first quarter.

*Strategy #1*

Provide project findings to communication director to obtain buy-in from management for strategic communication plan support and consistency in communication efforts. Identify communication liaison to work with Research Office to help identify projects for media coverage in large markets and other, less significant projects for smaller markets in which the research is taking place or has specific value.

*Tactic and related background*

Work with designated communication office staffer to identify four "newsworthy" research projects of interest to Columbus media, both print and broadcast, including Associated Press (AP) and National Public Radio (NPR) media to "pitch" (one per quarter throughout the year), based upon key benefits/problems solved and media interest; identify at least four other, smaller market research office stories (one to pitch per quarter) that communication liaison can work with local PIOs to develop/pitch.

Communication professionals already have media contacts and understand the types of stories and possible angles of interest to them.

### *Message*

Topic should be of interest to the general public, according to their concerns via public surveys: safety, congestion, road repair/maintenance. Key benefit to specific taxpayers (e.g., different demographics, businesses) must be made explicit. Examples of good story angles include areas where ODOT is a national research leader (e.g., pooled concrete/asphalt pavement research benefits) or the safety initiatives undertaken to help aging drivers.

Other ways to identify possible “newsworthy” projects include those associated with the acronym TIPCUP, meaning:

- those that are *Timely* (ties in to some national trend or story, e.g., the aging population, potholes in winter/spring, a bridge collapse elsewhere, or special project); these can be identified at any time by research office director/communication liaison

Examples of other timely news hooks could be tying in to a special day (these can be identified from *Chase’s Calendar of Events*, e.g., “Earth Day” could be a hook for environmental research projects, “National Transportation Week” and “Engineers Week” could highlight newly implemented projects or top researchers’ work, or anniversaries or milestones (30<sup>th</sup> year of the Research Office, for example) could be observed. Other common news hooks include “Top 10” lists, or, for example, “Top 3” transportation technology stories of the year, pitched to the transportation media contacts across the state. December is a good time of year to pitch stories, for news staffs are often smaller and many corporate news sources also slow down, due to holiday schedules.

- those that have obvious or immediate *Impact* on public’s lives
- those that involve someone *Prominent*

Whenever a political figure, entertainer, or celebrity of some sort can participate in some way or speak, this is news. For particularly big, unusual, or highly relevant activities, a press conference discussing the importance of a particular project to the region or the state can be enhanced by adding a noted speaker or official to the program. The presence of a university president, the governor, a mayor, Congress person, state transportation committee legislator, or a national transportation official can all help entice media representatives to attend.

- those that involve resolution of some *Conflict*
- those that are *Unusual* or novel
- those that have local *Proximity*.

The Research Office’s current practice of describing benefits in the proposal and including an implementation section in each project’s final report will be invaluable in determining projects with promotional potential. This information should be provided in an easy to read format and supplied to the communication liaison to describe ongoing and new projects prior to the initial project identification meeting.

### *Audience*

Key media contacts already established by communication office, including AP and NPR correspondents (and those identified in content analysis project as covering transportation news) should be contacted by communication office liaison to discuss (“pitch”) story ideas.

Research Office projects that are being conducted by specific universities or in specific geographic regions should include district PIOs in media pitch planning, for they have already established ties with these smaller, local media. These smaller market media are more apt to cover minor stories than are major metropolitan area media, who have many events/news items clamoring for their time and space.

Even a simple media alert, which outlines an event's basic who, what, when, where, how, and why—similar in nature to what many people use for party invitations—of an event in an abbreviated format on one page, can be sent to announce a photo opportunity and can result in coverage. Newspaper photographs can be a terrific way to help gain attention for office activities, as they are often more effective at drawing in readers than are long news stories.

District PIOs know how to alert local media, and they should be brought in to the planning discussion after initial projects are identified by the research office and communication liaison. In addition, the communication liaison/district PIO should help ensure that interesting video and photo opportunities exist for broadcast and print and that media kits are developed that will include at least a news release about the project with contact information for more details, a fact sheet of the project, and bios of any prominent players/researchers. If any photo files or graphics are available to place on CD, this is recommended as well. Include human interest (people doing something or unusual or surprising visuals) whenever possible. Do not include merely photo files of equipment, roadways, “talking heads” or the like. Media kits are distributed to invited media at the event and are sent to those who cannot or do not attend immediately thereafter. Fact sheets can include not only research office or specific project details, but also background information about the DOT in general (e.g., the ninth largest highway network in the U.S.).

In addition, a research contact should be available to answer questions and/or demonstrate something (television must have visuals—the more compelling, the better) and all potential research spokespersons should be coached on relaying the Research Office's/ODOT's key message points in short, quotable sentences (i.e., sound bites). Complex information should be presented in easy-to-understand terms or analogies. Controversial or challenging questions (often surrounding taxpayer money, inconvenience, safety, environmental issues) should be anticipated and contacts should be prepared to respond to these in short, positive sound bites that “bridge” to key message points.

Because state PIOs are often from a print-oriented background, the research office may choose to consider securing ODOT media training or contacting the regional FHWA media relations contact and asking for media training for the Research Office, technical liaisons, and PIO staffers who will be involved in promoting the year's selected stories.

For selected projects that involve university researchers, district PIOs and/or ODOT's research office communication liaison should contact relevant university news and information service representatives as well. These are the public relations persons for the university/college and they also have media contacts and various publicity outlets. (For instance, they may want to participate in any news conference or publicize the importance of the research following the DOT's publicity efforts through their internal and alumni publications. They may want to develop a different angle or more involved news or feature article to publicize to their respective audiences.)

#### *Assessment*

To be evidenced by increased media exposure of positive articles and appearance of identified key messages (benefits; improvements; solving problems). (Ask the communication office to track resultant print publicity through their regular clipping activities. Broadcast outlets should be asked for courtesy tapes of coverage.) The Research Office can also include additional information opportunities for audiences by providing links on its Web site with more specifics about promoted projects. The number of Web hits for this information can be assessed via Web tracking software that allows for the tracking of the number of “unique” (individual) users; tracking of specific pages, documents, or link accesses; and tracking of user domains (for example, educational institutions, private ISPs, government agencies, commercial entities). Such software is highly recommended to glean additional information regarding Research Office Web site users and the site's most popular items. Primitive site “counters” can be

deceiving, as they include internal office staff who may access the site multiple times to make changes and updates.

#### *Strategy #2*

Take advantage of existing transportation-related column in a major city to disseminate positive research news. (Cleveland columnist takes readers' "traffic-related questions, rants and thoughts.")

#### *Tactic*

Identify 10–12 interesting ongoing research projects in or around Cleveland or any that have great potential to benefit Ohioans or the nation. Have the communication liaison pitch the idea of a monthly research project note to the *Cleveland Plain Dealer* transportation columnist.

#### *Messages*

1. Innovative, customer-focused research will positively influence Ohioans' lives.
2. Transportation research solves interesting problems through innovation.

#### *Audience*

Cleveland area residents and opinion leaders

#### *Assessment*

It is important in media relations to work at developing long-term, positive relationships. One way to assess this tactic is to note the columnist's initial receptivity to the idea and to track the number of research notes published in his column. A separate Web page URL or e-mail address could be included, if possible, and the number of accesses tracked. In addition, informally making notes regarding comments from people who mentioned the column also will provide anecdotal indicators of increased Research Office awareness.

#### 2.7.2 Objective 2: To increase awareness of ODOT internal constituents regarding research office activities to improve ODOT practices by end of the first quarter.

#### *Strategy #1*

Take advantage of existing internal communication vehicles to highlight problem-solving results of Research Office, without additional time or resource expenditures.

#### *Tactic*

Discuss with the *Transcript* editor the possibility of a regular (or at least quarterly) "problem-solving research" or research benefits column for the new version of *Transcript*. Projects identified for media coverage at the major and smaller media market levels could be the projects highlighted to avoid additional preparation or excessive time resources and to reiterate key projects to constituents. Such internal constituent knowledge is important when news reports occur, so they feel they are "in the loop" and are able to share in the pride of recognition by acknowledging the coverage when friends/family/acquaintances mention it. Include the Research Office Web site URL and an e-mail address for comments or more information to facilitate two-way communication. A consistent Research Page design or masthead should be incorporated into the publication.

#### *Message*

There is buy-in from management about the importance of research coverage in helping internal constituents take pride in and learn about and from ODOT research projects. Most survey respondents felt that the risk of no payoff was the greatest challenge facing the Research Office and others indicated frustration at not seeing the tangible, practical results of research projects. Such a column could help

demonstrate how it does solve problems and enhance ODOT activities.

#### *Assessment*

Assessment of this activity includes monitoring the number of Web page hits following dissemination of the research story, noting the number of e-mail messages generated by the piece, and informal feedback or “buzz” among colleagues.

#### *Strategy #2*

Take advantage of interpersonal communication opportunities to relay key benefit/problem solving messages without involving additional time constraints.

Word of mouth was listed by a number of respondents as another way in which they learn of Research Office activities. Communication research shows that interpersonal communication is generally the most persuasive communication method, and it is important in building trust and positive relationships. Therefore, it is helpful for key employees to know about important research or upcoming media stories prior to their release. The majority of responding administrators have been employed in their current position for fewer than five years; therefore, their impressions of the Research Office may not have as much depth or be as entrenched as those who’ve been in administration for many years. Working to build positive relationships with these employees through regular communication can be the start of a ripple effect, in which they then discuss or communicate research accomplishments with others.

#### *Tactic*

Reach internal audiences via select, identified meetings (at least one per quarter) to communicate with administrators/deputy directors and with technical liaisons. These meetings can be quite brief, but they provide an opportunity to convey key messages with frequency and regularity.

#### *Messages*

1. Research projects are relevant and yield tangible benefits throughout the organization. Get on the agenda to verbally announce brief updates and/or distribute one-page summary benefit problem solving research project fact sheet/report handouts akin to that distributed at exhibits. Note the exhibits attended and the ones the office staff are preparing to attend. Mention any upcoming or recent *Transcript* and media coverage.
2. The Research Office is interested in the needs and insights of upper management as well as other internal constituents.
3. Ideas and concerns of internal constituents are being acted upon with good results.

#### *Assessment*

Informal feedback and queries from colleagues during meetings and conversations can be noted. Success also may be evidenced through the distribution of publications/fact sheets/briefing reports distributed and by responses to correspondence that have included specific calls to action. For example, these calls to action may be specified opportunities for additional information, which could be assessed via e-mail/phone/personal requests or specific Web page hits (for example, a link to *Moving Forward* provides a technical fact sheet).

#### *Tactic*

Reach internal and external audiences by continued participation in OTEC (and participation in Ohio Contractors Association and Ohio County Engineers Association conferences) and by staffing an exhibit. (Also consider requesting others’ participation in OTEC activities, such as panel participants or presentations, to help further two-way communication and relationship building.)

*Message*

The exhibit area and presentations should emphasize the benefits of research relative to the attendees, if possible. This can also be done through the types of materials distributed at the exhibit, e.g. tech briefs or fact sheets. In general, high-profile Research Office projects, represented by high-quality photographs and graphics with benefit statements/figures should be included. The photographs should include people, when possible, as audiences tend to be drawn to the human aspect in images. Unusual photographs also tend to draw people in. ODOT's communications staff have expertise in this area.

*Media*

Develop an exhibit that includes key messages (new tag line—see below; key benefit messages). Similar expectations of internal and external constituents allow the same exhibit to be used for the year's conferences. Because the Research Office does not have an exhibit, a table-top unit should be purchased. They are easy to set up and transport. (Include a thumbnail graphic of the display pieces and where they go inside the table-top unit, so anyone from the Research Office can consistently set up and display the materials.)

Have current issues of *Moving Forward* and *Transcript*, along with publication sign-up sheets available at the exhibit. (New subscribers can be asked for either their e-mail addresses for electronic notification of newly posted issues or for their postal addresses for hard-copy distribution.) Distribute technical briefs of select research projects and their benefit/solution implications. Include Web site link address on the bulleted sheet for attendees who want more information about any of the highlighted projects.

*Assessment*

Distribution has traditionally been one of the ways that communications professionals assess their work. Therefore, having a count of publications available at the exhibit at the start of the conference and at its end can provide you with a number that represents interest in your office activities. A publication sign-up sheet that includes e-mail addresses for electronic distribution also should be available at the exhibit, and these new subscribers should be noted after the conference as well. These numbers help you assess how much interest was generated by each conference. It may be most productive to attend some conferences only every few years to help ensure that the office is reaching new audiences. In addition, the office Web site should be monitored weekly for a three-week period following the conference and any spikes in access should be noted.

2.7.3 Objective 3: To increase awareness of ODOT external constituents regarding research office benefits to them by the end of the first quarter.

*Strategy #1*

Enhance visibility and constituent reach by using an already identified information mechanism (conferences) to communicate interpersonally and visually (both powerful communication components).

*Tactic*

Identify at least one additional relevant conference or trade show per quarter for Research Office staff or researchers to exhibit and/or present. Consider such events as the Ohio Contractors Association and County Engineers of Ohio conference, based on respondent input. Also consider such conferences as the Ohio chapter of American Society of Civil Engineers and a political conference, such as those of the Ohio League of Mayors or Association of Towns and Townships. Such groups were alluded to by administrators and deputy directors as others who might have an interest in Research Office activities and are good audiences from a larger political standpoint. In addition, such participation could lead to possible news briefs or articles in these organizations' publications. If attendance is not possible, materials (e.g., research fact sheets, *Moving Forward*, LTAP training calendars, Research Office e-mail listserv

sign-up invitation, *Moving Forward* inserts packaged together) can be sent for giveaway to interested conference organizers.

#### *Messages*

ODOT research is solving problems and improving transportation practices, providing best practices and technology transfer information—issues respondents indicated an interest in receiving.

#### *Media*

The following media are recommended:

- table-top exhibit;
- easy-to-read research fact sheets that include problem-solving implications and implementation information, when possible, with links for more information on the Research Office Web page;
- compilation of *Moving Forward* project-related technical inserts into new research office “product” for distribution;
- previous and/or latest issues of *Moving Forward* with e-mail subscription and Research Office isterv invitations;
- presentation of specific project or overview of various conference-relevant projects; and
- LTAP training calendars, as appropriate.

#### *Assessment*

The number of people who view the exhibit (this can be done with a counter to indicate the people who stopped, looked at your display, and/or discussed something relevant to the office’s work) and the number of research fact sheets, technical insert packets, research papers, and training calendars distributed also can be assessed. The number of new *Moving Forward* subscription requests and Web page hits (monitored weekly for three weeks following the conference) can be noted.

#### *Strategy #2*

Communication professionals know that repetition increases retention and helps messages get through the information cacophony. Therefore, the Research Office needs to consciously and consistently reinforce the importance and results-oriented nature of its work on all communication materials.

#### *Tactic*

Develop and incorporate a new Research Office tag line in the next edition of the newsletter. Current tag line (the Spanish proverb) is clever; however, it does not focus on the key benefit message you want to relay to constituents. The Communications Office staff can be valuable in vetting your ideas. Introduction of a new tag line could tie in well with newly implemented columns. (Perhaps a simple modification of the design to visually demonstrate and gain readers’ attention to the content.) Include the new tag line on all newly developed communication materials.

#### *Message*

Include solutions to problems as benefit statement through something simple and to the point, e.g.: “Solving problems by encouraging innovation and efficiency” or “Solving Ohio’s transportation problems”; however, it’s possible the word “problems” could produce a negative reaction in people’s minds. Therefore, the Research Office should brainstorm and consider other possible tag lines or slogans, such as “Improving Ohio’s Transportation Systems,” which has dual meanings: highways and processes. Then, these possibilities should be discussed with the communications, management, and other internal and external audience members to determine a final, suitable message for repeated use.

*Media*

The tag line helps brand your office and should be included in all the materials you distribute, including the Web site, exhibits, fact/summary sheets, and correspondence (for example, in the e-mail signatures and at the bottom of letterhead, if possible).

*Assessment*

You can document all of the places your tag line appears as a reference and could test audience recall of it in the *Moving Forward* readership survey (discussed in section 2.7.4 under “assessment.”)

*Tactic*

Develop new Web pages to offer and highlight specific *Moving Forward* columns (see objective 4) in the areas that audiences have expressed the highest interest (via the surveys conducted for this study and via future surveys). For example, you might highlight a best practice page, ODOT solutions page, or technology transfer page each quarter and archive them on the Web site for three years.

Ask the ODOT webmaster if the featured headlines and links for these stories could be placed on the ODOT home page or be incorporated under a “Research Highlights” button. Projects highlighted could be those already identified with the communication liaison or other new or ongoing Ohio research projects.

Links for more or related information also should accompany each featured article, as well as an e-mail contact link. These highlighted articles also can be noted in a “*Moving Forward Archives*” box with their respective URLs.

The Research Office should also continue its selected use of direct mail to reach constituents with specific, important messages. Postal mail, if sent sparingly, is more apt to be opened and attended to, taking on an air of importance with today’s proliferation, ease, and cost-efficiency of electronic communication. The direct mail pieces should include the tag line, office URL, and an e-mail address.

*Assessment*

The number of Web page hits for these pages can be documented each month, and any increases or access spikes noted. For example, these spikes are likely to occur after *Moving Forward* is disseminated and after direct mailings.

2.7.4 Objective 4: To take a leadership role in information transfer to spread knowledge about good practices and facilitate information transfer (two-way communication) with constituents by the end of the fourth quarter.

*Strategy #1*

Develop positive relationships, sense of accessibility, leadership and increased visibility with constituents through regular communication and feedback opportunities.

*Tactic*

Take advantage of the opportunity to communicate with participants of the constituency survey through the next issue of *Moving Forward* and through the Research Office Web page.

*Message*

Thank those who participated for their input and announce specific ways the Research Office is responding to it. Solicitations for further feedback should also be included; in doing so, the Research Office is seen as responsive to constituents.

### *Media*

Develop an article for *Moving Forward* and include an e-mail address and call to action for additional input or to obtain more information (see below). Also add a brief personal note from the Research Office administrator on the front page of Research Office Web site with thanks and an e-mail link for responses. Announce changes to Research Office activities to show responsiveness to survey feedback.

These changes might include regular or semi-regular “columns” of interest, e.g., “best practices,” “ODOT solutions,” “technology transfer”—the topics indicated by internal and external constituents as important to them. Tech Briefs should remain as inserts in the newsletter, but they should have a consistent design and header, so viewers immediately recognize them and their value. For example, a large block-lettered “Tech Brief” at the top of the insert page, with a specific benefit subhead (as specified above) is a simple method for doing this.

Another simple method for drawing attention to research article benefit statements is the use of pull quotes (where a sentence or quote is set off in a box in the article). This draws attention to benefits and often entices the reader to read more.

### *Assessment*

Note the number of e-mail responses and the responses to “calls to action” for more information via Web page hits. Conduct the *Moving Forward* readership survey approximately 1 year (4 issues) after the changes are implemented to reinforce receptivity to feedback and to assess current knowledge and attitudes regarding newsletter value and Research Office services.

### *Tactic*

Continue to create the Research Office Listserv to alert subscribers to the most recent issue’s technology, implementation, good practices or other features, along with training opportunities and RFPs, via the newly posted online *Moving Forward*. Listserv could be expanded via e-mail lists available from constituency surveys, with an invitation to respond 1) if they have a desire to remain on the research office listserv and 2) if they have suggestions for upcoming conferences that the Research Office could either attend or send materials for giveaway (e.g., research fact sheets, LTAP training calendars).

### *Message*

The message should focus on the survey participants, thanking them for their response and discussing how the results are being incorporated into Research Office communication plans. It is best to note specific changes, if possible. For example, you could point out the development of new *Moving Forward* columns that will highlight good practices, technology transfer, and problem-solving research.

Include an invitation to join the Research Office listserv, so readers can be alerted to newly posted *Moving Forward* issues and upcoming research office events. You might also include an inquiry to readers that solicits requests for Research Office attendance or materials at conferences.

### *Assessment*

*Note how many requests to join the listserv and how many suggestions for possible conferences representation are received.*

### *Tactic*

Develop a separate transportation-related legislative committee listserv (or work through ODOT’s legislative contact) to relay progress about projects of note on a quarterly basis, beginning with the new legislative session. The majority of these survey respondents indicated they would like to hear about

research program activities this way. Also on the list should be other representatives in whose districts research projects are taking place.

#### *Message*

Provide them with a brief “FYI” fact sheet of transportation-related research projects of note. Information about research project successes, the number of ongoing projects, the investment involved, and the benefits to be derived all could be included in an easy-to-read bulleted format, along with a contact name and number for more information. Include a standard “boilerplate” at the end of the correspondence that provides a one-paragraph overview of the research program and its role in improving residents’ quality of life. An ODOT public information specialist or the research program’s communication liaison can help refine the boilerplate.

#### *Assessment*

Note how many information requests and the types of inquiries received. The Communications Office also should be asked to share with you any references to these projects by legislators found during the office’s publicity documentation (aka “clippings”) activities.

#### *Tactic*

Continue to partner with neighboring states via RAC regional meetings and regional Peer Exchanges to identify transportation problems and research priorities and to share good practices. Consider inviting research office representatives from neighboring states to OTEC to participate in a panel session about good practices. Ask for permission to post copies of their PowerPoint presentations on the Research Office Web site. Consider using this information as *Moving Forward* good practices articles. Also, propose an additional meeting/panel session at AASHTO or other relevant conference or meeting. Audiences reached via this tactic could include not only other state research office personnel but also ODOT internal and external audiences.

#### *Message*

The benefits of sharing common problems, research agendas, and good practices should be emphasized.

#### *Media*

Presentations, fact sheets, tech brief packets, the Research Office Web site, *Moving Forward* articles—all could be used to share information with others.

#### *Assessment*

Any successes (and also barriers) in facilitating information sharing at RAC and Peer Exchange meetings should be noted. In addition, informal feedback from meeting attendees can be documented. Research Office participants also might develop a brief survey to distribute to participants to help assess the usefulness of these activities and their desire to continue such efforts.

#### *Tactic*

Continue to ask all PIs to explicitly acknowledge ODOT’s Research Office and expand that request to include acknowledgement of each project’s technical liaisons. (Consider including a communications component as a requirement for submitted proposals or for those deemed by the Research Office to be potentially high-profile projects.) Also ask university/college-affiliated PIs to alert their respective institution’s news and information services department of the benefits and/or implementation of their ODOT Research Office–funded work.

### *Message*

Recognition of technical liaisons and ODOT's Research Office is important to reinforce the idea that research expenditures are critical to help solve problems and to improve Ohio's transportation system.

### *Assessment*

Note the number of acknowledgments documented in quarterly reports and to what audiences. These results can be incorporated into internal constituent updates (discussed in section 2.7.2).

## **2.8 Budget**

The primary expenditure associated with this plan is the time necessary to implement and assess it. Monetary resource allocations also are needed for the following promotional purchases/activities:

- new exhibit and materials (approximately \$800 for the table-top exhibit; in-house production of standard materials to display)
- additional printing, mailing, and shipping costs, as needed (\$500)
- additional travel (mostly automotive, in-state) (\$400)\*
- Web monitoring software (\$250)

Rough estimate of additional possible expenses: \$2,000. (These may be reduced, for example, by purchasing heavier stock paper and photocopying fact sheets in-house; making *Moving Forward* available online with notification via listserv, as opposed to additional hard-copy subscriptions; geographically strategic selection of additional conferences to attend.

\* Exhibit fees can substantially increase this estimate. Research Office should see if free or a discounted fee can be obtained for the state agency. If not, inquiries into sending materials that would be of use/interest to attendees should be pursued.

## **2.9 Timetable**

### *March*

#### Tasks

#### *Research Office Administrator*

- Meet with communication administrator to obtain buy-in from management for communication plan.
- Compile possible projects for media pitches.
- Meet with communication liaison to identify 4 major and 4 minor media market story ideas and news hooks.
- Pen column for *Moving Forward* and Web page that acknowledges survey participation and resultant changes.
- Identify at least one additional conference or trade show per quarter.
- Approach relevant state research office directors for possible panel/meeting cooperation.
- Identify 10–12 possible ongoing research projects in or around Cleveland or particularly interesting or innovative work to pitch as possible column material.
- Identify key message/benefit tag line for use on all subsequent communications.

#### *Communication Liaison*

- Contact and pitch first major media story.
- Contact PIOs to pitch local/more minor media market story.
- Pitch research topic idea to *Cleveland Plain Dealer* transportation columnist.
- Research Office administrator and communication liaison discuss possibility of *Transcript* column with editor.

*Research Office Staff*

- Compile initial Research Office listserv.
- Begin work on redesign of newsletter design to incorporate consistent, benefit-oriented page headers and possible new color experimentation.
- Work on new benefit-oriented Web page tabs.
- Discuss new Web monitoring software with ODOT Web master and identify software vendor.

**Assessment tasks** (to be conducted the first day the plan is implemented)

- Note baseline Web page hits (each individual page, if possible).
- Note baseline number of newsletters disseminated (current number of subscribers).
- Note baseline for numbers of listserv names.
- Track and note baseline monthly number of e-mails from Web site (track throughout the month by saving each in-coming e-mail throughout the month).

Quarterly newsletter and related tracking: Staff will also need to track and note baseline newsletter-inspired e-mails (begin tracking when newsletter first disseminated/posted; note quarterly).

*April***Tasks**

- Follow up with conference organizer to propose cooperative research reporting activity / meeting.

**Assessment tasks**

- Gather responses to listserv invitation.
- Note the amount of interest in cooperative, multi-state research reporting activity/ meeting.
- Note the number of Web page hits.
- Note any informal conversations or reactions to publicity gained as a result of communication plan activities from colleagues, staff.
- When the newsletter is produced:
  - \* Note the number of *Moving Forward* hard-copy subscribers.
  - \* Note the number of e-mails stemming from *Moving Forward* for the next three weeks.

Quarterly reporting: June to the following March

**Assessment tasks**

- Ask communication office for copies of articles or courtesy tapes from any media coverage.
- Note monthly Web page hits, with breakout by week, if media coverage obtained.
- Note Web page e-mail contacts.
- Note conferences attended and the numbers of materials distributed, subscriptions gathered, and number of exhibit visitors.
- Ask the communication liaison and/or PIOs how many research stories were pitched to the media.
- Note any meetings where the Research Office director communicates about program benefits coverage and the number of any handouts distributed.
- Note the number of names on the Research Office listserv.
- Note the number of *Moving Forward*-generated e-mails.

*November***Tasks**

- Prepare for the OTEC conference.

## *January*

### **Tasks**

- Draft the *Moving Forward* readership survey for inclusion in the spring issue. Make it available online via the Web site as well as distributing it to the Research Office newsletter listserv. Keep it short and simple, but include the following:
  - a request for the respondent's job title and geographic region and
  - questions regarding the respondent's knowledge (awareness), attitudes, and behaviors toward Research Office activities.

### *Tasks not yet identified by month*

- Communication liaison pitches quarterly major media stories.
- Communication liaison contacts PIOs to pitch local/more minor media market stories (quarterly).
- Research Office administrator incorporates acknowledgments and project communication components into the proposal process.
- Research Office obtains a legislative e-mail list (or regularly communicates with ODOT's legislative liaison to forward information).

### *Assessments not yet identified by month*

- Gauge the reaction to cooperative state research sharing activities and meetings and assess interest in further collaborations.
- Compile readership survey results.
- Compile any legislative responses or inquiries (ongoing).

## **2.10 Other possible ODOT strategies and tactics**

After the communication plan has been implemented and assessed, modifications can be made based on the amount of initial success. In addition, the Research Office may consider adding the following objectives, strategies and tactics:

*Objective 1: To increase the awareness of ODOT research office activities and their benefits to the general public in capital cities by [date].*

### *Strategy #1*

Consider developing (or participating in existing ODOT) outreach program to communicate research office work via community-oriented, interpersonal communication.

### *Tactic*

Highlight relevant/strategically selected research activities by having the research office staff or technical liaisons participate in at least two community speaker's bureau events and/or middle school educational presentations during Engineer's Week (February). Lower-income or minority schools could be sought out; ODOT headquarters tours could be another outreach option.

### *Message*

ODOT is engaged in beneficial, interesting research that benefits citizens. Transportation engineering is an exciting and worthwhile profession.

### *Media*

Personal communication will be used, for example speeches, presentations, tours. Fact sheets can be developed for the audience, and perhaps ODOT maps can be distributed. A children's ODOT map might

be a fun way to engage them and could include coloring options, if ODOT communications or research budget permitted.

#### *Assessment*

Note the number of attendees/participants, informal responses, and the numbers and types of materials distributed.

Objective 2: To take a leadership role in information transfer to spread knowledge about good practices and facilitate information transfer (two-way communication) with constituents by [date].

#### *Strategy #1*

The Research Office will develop positive relationships and increase visibility and perceptions of leadership with constituents through regular communication and feedback opportunities.

#### *Tactic*

Develop a Research Office advisory board to serve for two years to 1) provide informal feedback and article suggestions and submissions for the Research Office newsletter; 2) discuss work of other DOT departments and external organizations and possible Research Office participation in other events and activities; 3) to serve as possible project reviewers; and 4) to provide input/feedback into ODOT strategic plans, as desired.

Most ODOT Research Office survey respondents did not feel as though they were part of the office's strategic planning process, and results were mixed regarding input into the program at the project level. Advisory boards can help alleviate these sentiments.

A set of advisory board expectations should be developed prior to inviting board members to participate. A total of 6 to 10 members should make up the board. The advisory board's names and those of their organizations should appear in a box in each issue of the Research Office newsletter and on the Web page. (You might consider an article introducing the board as a whole and/or feature articles that highlight individuals and the organizations with whom the Research Office works and how.) Such formal association with others can enhance perceptions of credibility, accessibility and responsiveness and helps the Research Office stay in touch with constituents' concerns and innovations/trends in the field.

#### *Message*

The message to board members is that their views are important and they can help the Research Office spread information about good practices and technology transfer, and identify and respond to problem-solving research proposals.

#### *Media*

The Research Office should communicate with the board at least quarterly via e-mail or telephone and might want to have a face-to-face meeting at a well attended conference, such as OTEC.

#### *Assessment*

This tactic can be assessed by noting the participation of individual board members, including the quality of input and *Moving Forward* articles generated, and the number of new opportunities, partnerships, and/or conferences that result from the board's input.

#### *Tactic*

Identify at least two professional trade publications (e.g., state engineers association or other industry-related, political or business publication) to pitch feature research-related stories. The audience should be

strategically selected to help build connections that will further Research Office goals, and the articles can be drawn from articles already published and adapted to address this particular audience and its interests. The communication liaison can be approached to provide editorial guidance.

*Assessment*

The amount of interest shown by publication editors as well as the number of articles published and the reach (circulation) of each should be noted. Associated feedback (informal or formal via Web page hits and requests for more information) also should be documented. You may consider attending, exhibiting, or sending materials to the group's next conference.

## **Chapter 3:**

### **State DOT Research Office Communication Template**

#### **3.1 Introduction**

No matter how much an organization contributes to society, it must be deliberate and proactive in relaying its good work to others. The same holds true for government agencies and departments. If state DOT Research Offices are not proactive in their communication efforts, their positive news remains unknown by citizens, most transportation professionals, and countless employees and legislators. Although many state DOT Research Offices have elements of communication plans in place, they may not possess formalized plans that strategically outline communication basics. In the nationwide DOT Research Office survey that was part of (and reported in) this study, the majority of respondents (55%) reported they had no FTEs focusing on marketing their respective research programs.

Therefore, this template is designed to help facilitate the strategic planning processes of offices that have little time for or expertise in formalizing their communication activities. No organization should seek publicity for publicity's sake; resources are too precious for that. All communications activities should be designed to achieve specific objectives as identified by the office or organization to move closer toward its organizational vision.

Strategic communication steps fall into several general categories, each of which will be described from the perspective of a research office new to such planning. These steps include developing a situation analysis and needs assessment; outlining a plan that denotes goals and objectives, audiences, communication strategies, key messages, and specific tactics; and describing how the plan will be evaluated.

#### **3.2 Situation analysis**

State Research Offices are likely aware of their respective DOTs' visions, values, and goals and build upon their organizations' overall missions to help enhance their citizens' quality of life. This commitment should be publicly stated in the form of an office vision statement that supports that of the department at large. To develop a vision statement, the Research Office's first step is to identify how it wishes to be viewed or seen by its constituents. This identification of a vision statement should be stated in terms that demonstrate support of the Department's overall mission as well. Ultimately, this will help strengthen support for the office and its communication plan at the administration level, which is crucial for long-term success.

Next the office should examine its current communication materials. For example, if the department has a newsletter, a Web site, an exhibit, tech or fact sheets, all should be examined to determine if they contribute to the image identified in the vision statement. Often organizations will find that their materials are unique and specific to the persons who wrote them, but there should be a consistent look, tone, and image portrayed in each piece. Over time, this consistency contributes to building your office's image and helps to immediately "brand" your office through the consistent use of color, logo, tag line (which is often an organization's vision or mission statement abbreviated to a short, catchy phrase).

One way to assess how well your office is doing in this regard is to take all of your communication materials and post them together on a bulletin board. Step back and see if there is a consistent image and look portrayed or if your materials appear varied and disjointed.

*3.2.1 Needs assessment: Conducting your own research.* Constituent research is key during this initial communication assessment phase. Effective public relations involves building and maintaining positive relationships through two-way communication, whenever possible. This allows you to stay in touch with your constituents to better serve their needs and to communicate your office's accomplishments. Identifying your list of key constituents (or primary target audiences) and secondary constituents (secondary target audiences) necessary to help you achieve your vision is helpful at this stage.

Research should be done regarding what these audiences currently know about your organization or office, their attitudes toward it, and how often they participate in office activities, if at all. You should also work to understand what these constituents deem personally beneficial about your work or activities.

Whereas some research is more formal than others, e.g. including a brief readership survey in your department newsletter or on your Web site, insights into current levels of knowledge and attitudes about your office also can be gleaned from informal activities. Talking with technical liaisons, research investigators, even friends and family members about their knowledge of your office, its work, and their perceptions regarding its efficacy will help your office identify its communication strengths, weaknesses, opportunities and threats (SWOTs). Creating a baseline of communication activity usage also is helpful at this stage, so progress may be gauged as you implement your plan. For example, how many e-mails are received from the Web site link? How many and which conferences were attended last year and how many materials about your office were distributed or exhibited there? How many proposals were received?

### **3.3 Action plan**

After developing the vision, assessing your office's SWOTs, and documenting any baseline activities, the office should identify its general goals. It is recommended that a yearly plan be developed to allow time to see and measure progress. However, the plan should be assessed throughout the year and again at year's end. Once an initial plan is in place, it can be easily adapted for succeeding years.

*3.3.1 Establishing goals.* Communication goals should be broad general statements. For example:

- 3) *Make public, internal and external constituents aware of Research Office activities and their associated benefits.* It is anticipated that the ultimate result of such exposure will be an increase in positive attitudes toward the DOT and transportation research and to help spur adoption of innovative technologies among others.
- 4) *Help the Research Office better serve its constituents through the development of feedback mechanisms to enhance Office/constituent relationships.*

*3.3.2 Specifying objectives.* Drawing from these goals, specific, realistic, measurable objectives need to be developed. These specify the desired outcomes, or results, that will systematically help you achieve your overall goals. This process does not need to be onerous; it is simply a way of formalizing your plan, so it can be incorporated into your work activities. Working to achieve one or two communication-related objectives can be a healthy start to making a real difference in your office's image and relationships with key constituents.

Communication objectives generally fall within three categories:

- 1) those of increasing target audiences' knowledge or awareness about something, such as the varied research activities of your office;
- 2) changing or reinforcing target audiences' attitudes regarding something, such as managing external research projects; and
- 3) motivating target audiences to perform some behavior, such as voting to support additional state research dollars or developing news stories about research accomplishments.

The latter objective is the most difficult: motivating people to do something. To accomplish this, communicators must first make sure the audience is aware of the issue or activity at hand, and that they are persuaded by some benefit of participation in the issue or activity to make them favorably inclined toward it.

In developing these three basic communication objectives (knowledge, attitude, behavior), it may be helpful to ask yourselves with whom the office wishes to develop more positive relationships to help it achieve its communication goals. For instance, does the office need to establish more regular communication with its district offices? Promote its research successes to both the general public and other state transportation personnel? Develop better relationships with government or professional organizations, such as the County Engineers Association? These would be your identified target audiences. Then ask yourselves how much knowledge or awareness these audiences have now about your organization and its activities. What are their attitudes toward your Office or its specific activities? What, if anything, do you want them to do?

Objectives should be realistic, so as not to set yourselves up for failure, and have deadlines attached, so success can be monitored (e.g. quarterly) to gauge progress. When possible, you should specify quantifiable increases (e.g. increase the number of research proposals received by 15% over 2005; increase the number of conferences attended to reach target audiences by three over 2005). When objectives have been developed, strategies can then be identified that will guide the office toward achieving them. Examples of objectives developed for the Ohio DOT Research Office follow:

3. To increase the awareness of DOT research office activities and their benefits to the general public by [insert date].
4. To increase awareness of DOT internal constituents regarding Research Office activities that help improve DOT practices by [insert date].
3. To increase awareness of DOT external constituents regarding research office benefits to them by [insert date].
4. To take a leadership role in information transfer to spread knowledge about good practices and to facilitate information transfer (two-way communication) with constituents by [insert date].

*3.3.3 Segmenting audiences; determining strategies.* Once your objectives have been specified, it becomes easier to identify and segment specific target audiences. These audiences should be defined as much as possible. For instance, objective one above specifies reaching the general public. The Ohio general public has certain known demographics. These should be noted. Are there particular age groups or educational levels that you might want to specifically target? (For example, middle-aged and older residents with higher than average educational levels who are active in the community and in politics may be the group of most concern.)

To be efficient regarding communication efforts, media that reach large numbers of your target public (such as those located in the major cities) should be used. Therefore, using particular mass media outlets in large markets becomes a communication strategy. (Your DOT Communications Office has media lists and contacts, and your work should be coordinated through them.)

Also, urban and rural residents likely have different age, income and education levels and different transportation needs and concerns. These differences should also be noted when defining your audiences and the types of media and tactics best used to reach them.

Therefore, audiences are usually defined using three types of criteria:

- demographics (age, income, education, gender)
- geographics (urban, rural, suburban)
- psychographics (values and lifestyles)

The more you define your target audiences, the better you can be at crafting messages that will resonate with them and in using the appropriate media to reach them.

In addition to specifying large urban media outlets as a communication strategy to reach your target audiences, in this example you might also wish to use weekly newspapers located in rural regions to reach these citizens. These publications often are hungry for news to fill their pages. (Again, your DOT Communications Office can help identify and disseminate information to these outlets.) If you were looking to reach other transportation officials, then specialized trade media would be your strategy.

The most persuasive form of communication is interpersonal, as it allows for immediate feedback and dialogue. You might consider holding public meetings or some type of community special event as another way to help increase awareness to facilitate dialogue with your target audiences. Of course, you must always keep in mind your time and staff constraints. Partnerships with other established groups or organizations are another common communication strategy, as is the identification and use of opinion leaders who are apt to gain the attention of your particular target audiences.

*3.3.4 Developing key messages.* Why should your target audience seek out, listen to, read, and/or act on your messages? Communications professionals know that audiences are largely motivated to attend to messages based upon the perceived benefits their expended time and energy will reap. Therefore, the benefit to your audience to attend to your messages should be immediately apparent, regardless of the type of communication piece, or your messages are likely to go unheeded in our cacophonous society.

The good news is that the public, in general, has a high regard for research and a desire to know about it. In this study's general public survey, 92% of survey respondents believed that research was important to solving transportation problems, and 81% reported they were very or somewhat interested in knowing how research is addressing transportation issues. However, the survey also revealed that an overwhelming majority (more than 80%) did not know that Ohio's DOT had a research program and had not heard any news about Ohio transportation research. Those who had heard of ODOT research reported hearing of it through newspapers or the local news broadcast, and the majority of respondents perceived these stories as being positive in tone.

The documented interest in transportation research among Ohio's residents—and as far as possible, your own residents—should be communicated to your DOT managers, public information officials, and subsequently incorporated into DOT communication strategies to reach the media and the audiences they serve. Appreciation of and support for a strategic communication plan by top management is critical for any organization. (More information regarding constituents' perceived Research Office benefits, limitations, and preferred communication mechanisms can be found in other sections of this research project report.)

In addition to explicit benefit statements, Research Office information should be communicated in ways that audiences can easily understand, e.g., not reporting that a given research project has resulted

in a “stronger pavement” but the more explicit “it adds six years to pavement life, saving money and extending quality roads.”

*3.3.5 Communication tactics.* Tactics are simply the ways you implement your strategies. In other words, they are the specific tools you use to communicate your key messages to your audiences. Specific newspapers, television stations, newsletters, and speeches to identified groups are all examples of the tools with which you might communicate. When specifying your communication tools, keep in mind that there is usually an overlap in the readership and viewership of newspapers and local news stations, and that repetition of messages is a good thing. Repetition increases retention.

However, the types of stories that newspapers and news stations cover and how they present them differ. Print and broadcast media each has specific strengths and needs. Newspaper reporters can easily cover more complicated or complex subjects, but still need photographs or graphics to complete the package; broadcast stations need short sound “bites” of clear, simple sentences and interesting visuals for the viewers. The same story can be pitched to both media, but one must be aware of and respond accordingly to the requirements of each.

Your DOT Communication Office should be contacted and made aware of your strategic Research Office communication plan, so they can help you in identifying newsworthy stories and pitching them to the appropriate media outlets, as well as helping you develop a consistent Research Office tag line, slogan, or key benefit message that can be incorporated into all research office communication media (e.g., newsletters, Web sites, brochures, exhibits). Such repetition and message consistency help enhance retention of key messages and help build the desired image or “brand” of the research office.

Examples of two specific tactics to reach the general public might be as follows:

- work with a designated Communication Office staffer to identify four newsworthy research projects (one each quarter) to pitch to capital city media.
- work with Communications Office staffer to identify four smaller market research office stories (one per quarter) and relay that to the local PIO to develop/pitch.

Research Office projects that are being conducted by specific universities or in specific geographic regions should include district PIOs in media pitch planning, for they have already established ties with these smaller, local media. These smaller market media are more apt to cover minor stories than major market media, who have many events/news items clamoring for their time and space. Even a simple media alert sent to announce a photo opportunity can pay big dividends in getting out key messages to the public. District PIOs know how to alert local media. They should be brought in to the planning discussion after initial projects are identified by the research office and communication liaison. (For more about identifying “newsworthy” stories and preparing information that helps reporters, see the ODOT communication plan included in this study.)

For selected projects that involve university researchers, district PIOs and/or DOT’s research office communication liaison should contact relevant university news and information service representatives as well. These are the public relations persons for the university/college and they also have media contacts and various publicity outlets. (For instance, they may want to participate in any news conference or publicize the importance of the research following the DOT’s publicity efforts through their internal and alumni publications. They may want to develop a different angle or more involved news or feature article to publicize to their respective audiences.)

Of course, there are other tactics to reach your target audiences. Newsletters are the most popular form of communication used by state DOT Research Offices, according to this study. However, printing and mailing them are expensive. After identifying your target audiences, you may find you can reach them via

e-mail and then offer your newsletter electronically via an e-mail list and your office Web site. Exhibits are long-term investments that can be designed to have interchangeable sections, depending on the audience (general public vs. transportation officials vs. university researchers, for example). You can obtain information from persons who attend and are interested in the Research Office's work via a sign-up sheet, which is then coded as to the type of audience and added to your mailing list database. The types of information offered at your exhibit also can be tailored for each audience you are looking to reach. Speak with DOT Research Offices with well established communication plans (e.g. California, Connecticut, North Carolina, among others) regarding their newsletters and mailing lists, and access their Web sites to help you generate ideas for your office.

Additionally, word of mouth and peer-to-peer communication are highly effective. Making announcements at meetings, giving presentations, and promoting your good efforts informally to your constituents are also good ways to spread the word of your office's accomplishments without spending much money.

### 3.4 Evaluation

Although the above objectives should be assessed according to their specified dates (usually annually), assessment should be ongoing, so early success indicators can be gauged and plans adjusted accordingly, as needed. Quarterly reports are useful for this. Adaptation and continuation of the communication plan should proceed into successive years by building upon the seeds sown the year before. Communication plans should become part of the Research Office's annual strategic planning activities.

Your Communications Office can help you track the amount of news media coverage (*number of placements* and *impressions*, or the potential number of persons reached by each story). You can also ask them to do a *content analysis* of the coverage to determine whether the story was largely positive, negative, or neutral in tone and if your key message points appeared. In addition, counting the number of unique Web hits to your site; e-mail correspondence; research proposals; persons reached through speeches, meetings, or special events; numbers of conferences attended where exhibits were used; number of newsletters and tech briefs distributed—all can be used to help you quantify and assess your communications efforts.

### 3.5 Budget and timeline

Once your plan has been developed, you can attach dollars and staff to each task and come up with a timeline that represents the year's activities. It is important to emphasize why the plan is being implemented (i.e. the benefits to your own office staff and colleagues), so it is not seen as just more work to be done in an already busy schedule. As noted before, it's critical to get your top management's buy-in by emphasizing the positive nature of research coverage, the public's interest in it, and how your plan helps enhance the department's overall visibility and helps it achieve its goals of customer satisfaction. Once management is on board, the Communications Office (which has a direct line to top management) is committed, and it makes your case to colleagues more compelling.

## Appendix A:

### Communication Audit Summary

This limited communication audit examined the basic communication tools of ODOT (home Web page and *Transcript* issues) and the Research Office (home Web page and *Moving Forward*) in light of the visions and/or missions expressed by each. An organization's communications should reinforce its vision and mission to help it further its branding and image goals. Efforts to secure media placement should also emphasize key benefits to the organization's audiences.

#### **ODOT Vision**

Elements of ODOT's vision include being efficient, diversified, and effective; an employer of choice; continuous improvement and decision-making close to the customer; a fair project-selection process; use of quality suppliers and vendors; continued high levels of transportation system safety and mobility; excelling at snow and ice control; fair employee selection and advancement system; an environment of quality, teamwork, and cooperation; an open environment where information is freely shared; a work force that is encouraged to improve.

#### **ODOT Home Page**

This Web page is extremely busy, which is understandable given the large scope of the department. However, by emphasizing everything, nothing stands out. The mission statement and tabs across the top are good, and the November 2002 page included "Transportation Studies of Interest" that contained links to specifics about congestion studies. Other front-page links included the Ohio's federal and state transportation funding agenda. New projects also are often featured on the front page, and news items are listed down the right side.

It may be impossible to decrease the amount of information provided to users on the home page, given the public's and department's varied interests. However, a headline and link that mentions how research is addressing the major concerns of Ohio residents (e.g., safety or congestion, as determined via this project's survey and that of ACCESS Ohio) could help reinforce ODOT's interest in and responsiveness to residents. An examination of other large-state DOT home pages (specifically those of Florida, Texas, California, Virginia, and Pennsylvania) revealed several mentions of research projects.

In other words, by giving greater prominence or positioning of benefits-oriented research, ODOT can help reinforce its commitment to and gain ground toward achieving its vision of an employer of choice that strives for continuous improvement and high levels of transportation system safety and mobility. ODOT does seem to be doing a good job of communicating in such a way as to enhance the site user's acknowledgment of quality snow and ice control, and by virtue of the amount of information provided and the amount of strategic planning information provided, its vision of fostering an open environment where information is freely shared.

#### **Transcript**

This monthly/semi-monthly publication was produced in two versions during the early months of this study: an external edition and an internal edition. The external edition ceased to be published in late 2002. Four issues were nonetheless reviewed (March/April through September/October 2002). Other than one issue that focused primarily on the dire funding situation, this publication consistently reinforced vision elements by focusing on continuous improvement and direct customer benefits. However, the publication failed to include a consistent tag line/benefit/value/mission statement, which would have made it a strategically stronger publication from a communications standpoint.

The primarily internal version of Transcript was reviewed as part of this project as well. Each issue from April 2002 to December 2003 was perused with ODOT's vision statements in mind. This publication helped reinforce these points by pointing out articles that related to specific ODOT strategic initiatives. Articles about best practices; work to address specific problems, such as congestion and safety; innovative projects; special events; how specific units contribute to the overall department mission; employee recognition; photographs of people in action (and not just posed photographs or visuals of equipment or roadways); quality writing and design; and the year-end accomplishments issues are all positive reinforcements of ODOT's vision. However, in reviewing these issues only one major article focused on the Research Office ("Seminar Brings Focus to ODOT Research Agenda," May 2003, p. 5). Not even the accomplishments issues seemed to highlight any research activities.

It could be argued that because research activities are monitored by technical liaisons throughout ODOT and because it contributes to the dynamic, forward-focused work environment and helps solve transportation problems, a regular research-focused column (perhaps quarterly) would make sense and help reinforce key elements of ODOT's stated vision.

### **Research Office Mission**

The Research Office does not publish a formal vision statement, but it is suggested that the administrator consider developing such a statement, at least for internal audiences. A vision statement describes how an organization would like to be or strives to be seen. It is the organizational ideal, and it helps people share in the vision of progress. Because there is no vision statement, the mission statement was used for the audit: "... to develop and manage a robust annual research program that is responsive to the department's strategic initiatives; rooted in economics; takes advantage of emerging technologies; provides information and technology for management policy decisions; provides mechanisms to share research results with customers; and produces practical results that have a strong possibility of being implemented."

### **Research Office Web Site**

The Research Office Web site is clean and clear, and contents are easily located. However, as discussed in the communication plan, the site should offer a benefit-oriented tag line of some kind (that's consistent with other communication material) and could offer tabs that are more "benefit-oriented" to audiences (e.g., "best practices," "training opportunities," "research projects"). The final reports, forms, links, and newsletter sections do fulfill parts of the mission. However, rather than including the mission statement on the front page, the page could be made more enticing for users. For example, particular projects could be highlighted on the home page, with a link for more information. Although the newsletter is currently available, "teasers" or headlines announcing the latest issues and perhaps the lead (most compelling story) should be included. The same should be offered for tech briefs to draw attention to them.

In addition, it is good to facilitate two-way communication by inviting feedback. A place to sign up for the Research Office listserv and specific questions or requests for feedback (e.g., possible conferences to which research-related materials could be sent) could be featured on the front page or included as an additional tab (e.g., "Contact us" or "Feedback please" or "Let us know ..." or "Talk to us").

### **Moving Forward**

The quarterly Research Office newsletter is a good way to stay visibly in touch with constituents and the benefits-oriented tag line should be included in the design. However, the office administrator needs to decide whether internal or external constituents are the primary audience for the piece and then include benefit-oriented headlines and articles accordingly. In addition, subscribers can be extended to others (as discussed in the communication plan) via the Web site at no additional cost. Issues from Winter 2001 to Winter 2004 were reviewed as part of this project.

As also mentioned in the communication plan, benefit-oriented newsletter columns, incorporated into the design, can draw the desired audience's attention to that page. (Column placement should be as consistent as possible.) Likewise, inserts also should bear some benefit-oriented headline and some consistent design element, and the inserts should be specified on the Web site (rather than just "insert").

The box with staff names, titles, and contact information is an excellent component, giving the reader the impression that the staff is open to contact and feedback.

### **Conclusion**

There are many positive elements to the existing communication activities of ODOT and the Research Office. Strategic thinking in terms of primary audience, active identification and promotion of significant research projects, and continued openness to feedback and improvement will only strengthen already effective efforts.

## Appendix B:

### Content Analysis—Newspaper Article Summary

#### Background

A graduate student conducted Lexis-Nexis database searches using the search terms “Ohio Department of Transportation” or “ODOT” and “research.” Article searches were conducted from August 2002 to December 2003. Only one article was selected for analysis when it appeared in multiple publications (e.g., AP articles that were picked up in multiple state newspapers).

Articles were then reviewed and a basic content analysis judgment made regarding content: overall positive, negative or neutral toward ODOT. A random sample of 25% (5) of the articles were pulled to assess intercoder reliability. A satisfactory alpha of agreement was achieved at .85.

Initial article searches using the two search terms were done for background from October 2001 through July 2002 (prior to this research project’s start date). Nine articles were identified; of these, seven were deemed neutral and two were deemed positive; none were deemed negative.

Research-related articles: only one article was located during the study period that met the criteria for ODOT research:

- May 20, 2003, *Columbus Dispatch* (news), “Scientist’s software makes road sensors work harder”; Content: **positive**  
Media contact/author: Mike Lafferty

Because ODOT research articles were not being located, the graduate student was instructed to pull other major ODOT articles, regardless of research content. “Major” articles were those that did not report routine construction or grant announcements.

The total number of articles identified by the graduate student was 22, and included the following:

- Oct. 6, 2002, *Columbus Dispatch* (news), “Agency’s troubles noted by auditor”; Content: **negative**
- Oct. 12, 2002, *Columbus Dispatch* (editorial), “Unwarranted Action: Why did Ohio drive away from program promoting durability of roads?”; Content: **negative**
- Oct. 15, 2002 Associated Press article (news), “Study recommends Ohio get ready for big increase in truck traffic”; Content: **negative** (Note: This article dealt with a “study” but never mentioned research. The article talked about the problems of increased truck traffic and recommends more funding; however, no explicit benefits are stated in the article.)
- Oct. 16, 2002, *Columbus Dispatch* (news), “ODOT adept at avoiding impact rules, study says”; Content: **negative**
- Oct. 18, 2002, *Columbus Dispatch* (editorial), “America needs a comprehensive transportation strategy.”; Content: **neutral**
- Jan. 30, 2003, *Columbus Dispatch* (accent & arts), “That sinking feeling: Here’s everything you need to know about the pockmarked pavement”; Content: **neutral**
- Feb. 27, 2003, *Columbus Dispatch* (news), “Lobbyist’s effect on ODOT choices being questioned; Legislator reopens asphalt-concrete debate”; Content: **negative**
- March 7, 2003, *Columbus Dispatch* (news), “Study faults Ohio gas-tax distribution; Cities pay more, but receive same revenues as rural areas”; Content: **negative**
- March 4, 2003, *Columbus Dispatch* (news), “Concrete Rule: No Special Deals: Transportation director fires deputy who got a bargain on driveway paving”; Content: **negative**

- June 10, 2003, AP reporter (state & regional), “Lawmakers discuss finding for Ohio transportation projects”; Content: **negative**
- July 1, 2003, *Columbus Dispatch* (state & regional), “Construction of Ohio’s interstate system nearing end”; Content: **positive**
- July 18, 2003, *Columbus Dispatch* (news), “Design could cut intersection congestion; Continuous-flow idea might offer relief for motorists stuck at Rt. 23/Powell Rd.”; Content: **positive\***
- Aug. 6, 2003, *Cleveland Plain Dealer* (arts & life), “Helping injured dog on road is tough task”; Content: **neutral**
- Aug. 6, 2003, *Columbus Dispatch* (front page, lead story news), “Taft wants to spend \$5 billion for roads”; Content: **positive** (Note: Benefit statement contained in the third paragraph of the story: “Taft’s plan aims to improve safety, facilitate commerce and link rural areas by 2015.”)
- Aug. 8, 2003, *Dayton Daily News* (local), “Warren to study transit; State OKs \$25,000 to review public transportation”; Content: **positive**
- Aug. 14, 2003, *Cleveland Plain Dealer* (business), “ODOT cleared of favoritism charges; Concrete firms fought asphalt”; Content: **neutral**
- Aug. 6, 2003, *Columbus Dispatch* (news, front page), “Taft want to spend \$5 billion for roads”; Content: **neutral**
- Sept. 5, 2003, Gannett News Service, “Study says almost half of Ohio roads are ‘mediocre’”; Content: **negative**
- Oct. 3, 2003, *Columbus Dispatch* (news), “With I-670 open, cars breeze through split”; Content: **positive**
- Oct. 16, 2003, *Columbus Dispatch* (editorial), “Designed for danger? One man’s campaign to improve highway safety has begun to pay off”; Content: **negative**
- Oct. 30, 2003, *Columbus Dispatch* (news), “ODOT to improve neighborhood’s access to Rt. 23; State officials fixing turn lane to improve U-turn safety after drivers’ complaints”; Content: **neutral**
- Nov. 8, 2003, *Cleveland Plain Dealer* (metro), “Study faults ODOT’s method for choosing paving materials”; Content: **negative**

\*innovation stemming from research conducted elsewhere

Totals: Research article:	1/1 (100%) positive
Other major DOT articles:	11/22 (50%) negative
	6/22 (27%) neutral
	5/22 (23%) positive

Media contacts of articles noted above:

- *Columbus Dispatch*
  - o Robert Ruth
  - o Doug Haddix
  - o Brian Williams
  - o Alan Johnson
  - o Kevin Parks
  - o Debbie Gebolys
  - o Eileen Dempsey
  - o Lee Leonard
  - o Jonathan Riskind
  - o Debbie Gebolys

- *Dayton Daily News*
  - o Kristin McAllister
- *Cleveland Plain Dealer*
  - o Suzanne Hively
  - o Rich Exner (Note: Mr. Exner has a column in which he takes readers' "traffic-related questions, rants and thoughts.")
  - o Julie Carr Smyth
- Associated Press
  - o Kristen Gelineau (Cleveland)
  - o Mark Williams (Columbus)
- Gannett News Service
  - o Greg Wright (Washington)

Because of the lack of research articles, a limited search for other transportation research articles was conducted. A sampling of the types of research articles and their tone follows:

- June 9, 2002, *The Seattle Times* (local), "Highways bring death to animal habitats; Wildlife pays a high price for roadways"—Discusses DOT's sign and design work to help address problem
- July 18, 2002, *USA Today* (money), "Study questions high-intensity headlights"—Discusses findings of HID headlights for vision, safety
- Oct. 16, 2002, *Rocky Mountain News* (local), "Law credited with saving lives; Traffic deaths drop 45% in accidents with 16-year-olds"—Discusses benefit of new law in accident decrease
- April 17, 2003, Ascribe Newswire, "Researchers use \$400,000 grant to study yellow highway lines"—Discusses yellow vs. white highway lines and their part of the national highway code and the study to learn if drivers perceive a difference
- Dec. 17, 2003, *New York Times* (science), "Smartest bridge in the nation?"—Discusses new instrumented Star City bridge in West Virginia and how it will benefit researchers, engineers

Other transportation research article topics/publications/contacts discovered during Lexis-Nexis searches:

- Transportation Research Center (AP News wire, Ohio; *Dayton Daily News*)
- *Engineering News-Record*
- *Louisiana Contractor*
- *American City & County*
- Battelle Research Institute (Columbus)
- The Road Information Program (TRIP) (Washington, DC, nonprofit)



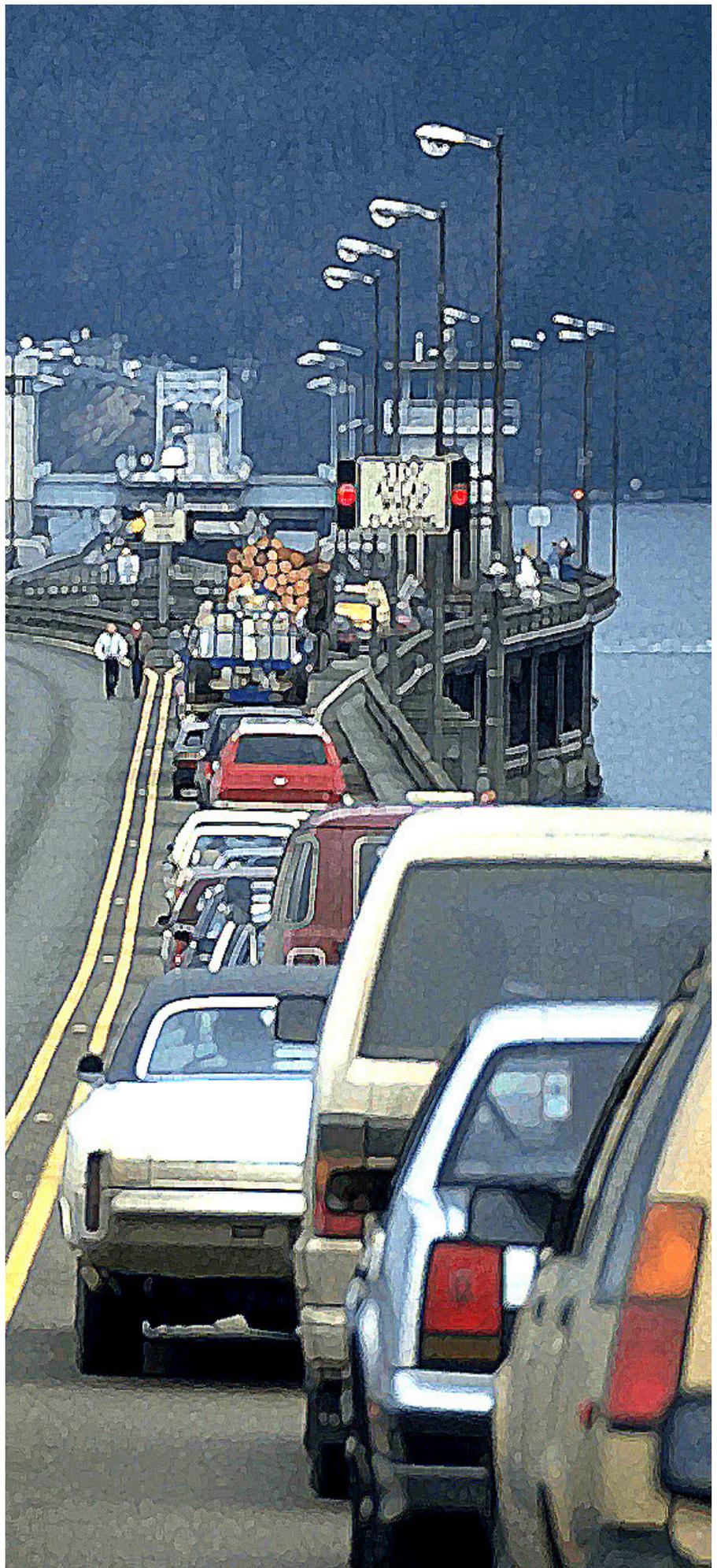
# Communication Strategies for State Transportation Research Programs

## **Volume II of IV: Internal ODOT Constituent Surveys**

for the  
Ohio Department of Transportation  
Office of Research and Development  
and the  
Mid-Atlantic University  
Transportation Center

State Job Number: 14806(0)

**JUNE 2005**





## **Communication Strategies for State Transportation Research Programs**

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State Job Number: 14806(0)

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and  
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Office of Communications

June 2005



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12. Sponsoring Agency Name and Address <b>Ohio Department of Transportation 1980 W Broad Street Columbus, OH 43223</b>	15. Supplementary Notes	
16. Abstract <p>Transportation research is often "open ended" and difficult to measure, in that its beneficiaries may not know how they have been served by research activities and results. This research project sought to 1) obtain feedback from Ohio Department of Transportation (ODOT) constituents, 2) develop a strategic communication plan that supports ODOT's overall mission and goals, keeping in mind research office resources, and 3) develop a communication template that other DOTs could model or use. To accomplish these objectives, existing knowledge, attitudes, and behaviors regarding Ohio DOT's research office were obtained through a number of surveys. Those surveyed included the Ohio general public, internal DOT constituents (technical liaisons, administrators and directors, district deputy directors, district research contacts, FHWA regional center directors) and external DOT constituents (consultants, contractors, transportation committee legislators, and college civil engineering department heads). In addition, a nationwide survey of DOT research office directors was conducted to determine the constituents with whom their offices communicate and the means by which they do so.</p> <p>Common areas of interest among constituents were identified, from which key research office messages were proposed, so they might be included in research office correspondence and publicity. Constituents' preferred methods of obtaining research office information also was explored. The study found that most research office directors believe they communicate well internally but do not communicate effectively to external audiences. It was found that part of this problem could lie in the underutilization of communication office personnel, who have the training and contacts to spread the word about transportation research.</p>		
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# Chapter 1:

## Introduction/Method

### 1.1 Background

This project involved five separate internal ODOT constituent surveys, conducted in August 2003. Internal constituents consisted of the following groups:

- ODOT administrators/directors who are largely involved in the research program (determined by division)
- ODOT administrators/directors who are not largely involved in the research program (determined by division)
- ODOT Technical Liaisons
- ODOT District Deputy Directors
- ODOT District Research Contacts

All surveys were reviewed and pre-approved by the project's administrative and technical liaison, Monique Evans, and both project PIs. Internal constituent surveys were either mailed, faxed, or e-mailed. At least two follow-up contacts were made for e-mailed and faxed surveys to try to increase response rates; the mailed surveys contained self-addressed, postage-paid envelopes.

Survey response rates and survey dates are provided in the key summary findings pages for each survey. The key summary findings precede each survey instrument and the detailed results for each question asked.

### 1.2 Administrators/Directors (largely involved) survey instrument

Dear ODOT Colleague:

The Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or [knott@ohio.edu](mailto:knott@ohio.edu).

Thank you for your participation. Please return your responses via e-mail to [knott@ohio.edu](mailto:knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

1. What is your working title (e.g., project engineer) (optional)?
  
2. What is your work classification (e.g., TE 3)?

3. In what division/office are you employed?

4. How many years have you been employed in your current position?

5. To what degree would you say you are involved in the research program?

- Very involved (*Go to 5a*)
- Somewhat involved (*Go to 5a*)
- Not very involved (*Go to 5b*)
- Not at all involved (*Go to 5b*)

5a. In what ways are you involved? (*please select all that apply*)

- Project monitor
- Supplied research needs/project ideas
- Implementation of a product of the research program
- Reviewed research proposals being considered for funding
- Reviewed final reports
- Other (*please specify*) \_\_\_\_\_

5b. What is the main reason for your lack of involvement?

6. What is your motivation for being involved in the research program? (*please select all that apply*)

- Part of my job description
- To extend my knowledge in my field
- To interact with researchers and engage in different activities
- To provide solutions to technical problems relating to my unit
- Other (*please specify*) \_\_\_\_\_

7. What do you like most about being involved in the research program?

8. What do you like least?

9. How has your involvement enhanced your professional development?

10. How has your involvement improved the efficiency or effectiveness of your job or program?

11. Regardless of your level of involvement, please rate the following activities you EXPECT from the research program. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other (please specify) \_\_\_\_\_

12. Please rate the following ODOT research program stake holders according to level of priority. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.

- The research community
- ODOT engineers
- ODOT managers
- The traveling public
- Other DOTs
- Particular unit(s) or division(s) within ODOT (specify) \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

13. Which of the following statements best describes the extent to which your expectations are being met?

- Research regularly meets my/my department's expectations
- Research sometimes meets my/my department's expectations
- The Research Program is helping other constituents but not me/my department
- Research is off on its own, doing its own thing and is not much help to anyone

14. How do you learn of research program projects or activities? *(please note all that apply)*

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Internet or listservs
- Web page
- Conferences such as OTEC *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_
- Colleague *(please specify type)* \_\_\_\_\_
- Researchers *(please specify type)* \_\_\_\_\_
- Other *(please specify)* \_\_\_\_\_

15. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

- Yes  
 No  
 Sometimes  
 Don't Know / Not Applicable

16. Are you aware of any research program activities that resulted in the following:

- Personnel cost savings (*please specify*) \_\_\_\_\_  
 Other cost savings (*please specify*) \_\_\_\_\_  
 Safety improvements (*please specify*) \_\_\_\_\_  
 Quality improvements (*please specify*) \_\_\_\_\_  
 Better materials (*please specify*) \_\_\_\_\_  
 Better methods (*please specify*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_

17. Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.

- SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

17a. If so, how did you hear of them? (*please note all that apply*)

- Transcript* newsletter  
 *Moving Forward* research newsletter  
 Memoranda / Letters  
 Intranet or e-mail  
 Internet or listservs  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio)  
 Colleague  
 Other (*please specify*) \_\_\_\_\_

18. What kinds of limitations, if any, do you believe the Research Office faces? (*please note all that apply*)

- Inadequate staffing  
 Inadequate funding  
 Inadequate support from sponsors  
 Risk of no payoff  
 Political considerations  
 No significant limitations  
 Other (*please specify*) \_\_\_\_\_

19. What is your *preferred* source of information about the research program? That is, how could the Research Office best keep in touch with you?

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Web page
- Conferences such as OTEC (*please specify*) \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleagues
- Other (*please specify*) \_\_\_\_\_

20. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

21. Do you feel that you have input into the research program at the project level?

- Yes
- No
- Not Sure / Don't Know

22. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

23. Finally, please take a moment to consider—and then list—any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses to Dr. Knott via the postage-paid envelope or fax them to 740-593-2592.

### 1.3 Administrators/Directors (not largely involved) survey instrument

August 3, 2003

Dear ODOT Colleague:

The Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Please complete the survey as soon as possible and return it in the enclosed self-addressed, postage-paid envelope or fax it to Dr. Diana Knott at 740-593-2592.

Should you have questions regarding this project, please contact Diana Knott at 740-597-1294 or knott@ohio.edu.

1. What is your working title (e.g., project engineer) *(optional)*?
  
2. What is your work classification (e.g., TE 3)?
  
3. In what division/office are you employed?
  
4. How many years have you been employed in your current position?
  
5. To what degree would you say you are involved in the research program?
  - \_\_\_\_\_ Very involved *(Go to 5a)*
  - \_\_\_\_\_ Somewhat involved *(Go to 5a)*
  - \_\_\_\_\_ Not very involved *(Go to 5b)*
  - \_\_\_\_\_ Not at all involved *(Go to 5b)*
  
- 5a. In what ways are you involved? *(please select all that apply)*
  - \_\_\_\_\_ Project monitor
  - \_\_\_\_\_ Supplied research needs/project ideas
  - \_\_\_\_\_ Implementation of a product of the research program
  - \_\_\_\_\_ Reviewed research proposals being considered for funding
  - \_\_\_\_\_ Reviewed final reports
  - \_\_\_\_\_ Other *(please specify)* \_\_\_\_\_

5b. What is the main reason for your lack of involvement?

6. Regardless of your level of involvement, please rate the following activities you EXPECT from the research program. (*please rate*)

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other (*please specify*) \_\_\_\_\_

7. Which of the following statements best describes the extent to which your expectations are being met?

- Research regularly meets my/my department's expectations
- Research sometimes meets my/my department's expectations
- The Research Program is helping other constituents but not me/my department
- Research is off on its own, doing its own thing and is not much help to anyone

8. How do you learn of research program projects or activities? (*please note all that apply*)

- Transcript* newsletter
- Moving Forward* research newsletter
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- Conferences such as OTEC (*please specify*) \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio) (*please specify*) \_\_\_\_\_
- Colleague (*please specify type*) \_\_\_\_\_
- Researchers (*please specify type*) \_\_\_\_\_
- Other (*please specify*) \_\_\_\_\_

9. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

- Yes
- No
- Sometimes
- Don't Know / Not Applicable

10. Are you aware of any research program activities that resulted in the following:

- Personnel cost savings (*please specify*) \_\_\_\_\_
- Other cost savings (*please specify*) \_\_\_\_\_
- Safety improvements (*please specify*) \_\_\_\_\_
- Quality improvements (*please specify*) \_\_\_\_\_
- Better materials (*please specify*) \_\_\_\_\_
- Better methods (*please specify*) \_\_\_\_\_
- Other (*please specify*) \_\_\_\_\_

11. Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.

- SHRP Pavement Project on Delaware 23
- Ohio Freight Study
- Evaluation of Warranty Provisions on ODOT Construction Projects
- Evaluation of Drainable Bases Under Asphalt Pavement
- Development of Crash Reduction Techniques
- Innovative Bridge Design Construction Techniques to Expedite Construction
- Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

11a. If so, how did you hear of them? (please note all that apply)

- Transcript* newsletter
- Moving Forward* research newsletter
- Memoranda / Letters
- Intranet or e-mail
- Internet or listservs
- Web page
- Conferences (*please specify*) \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleague
- Other (*please specify*) \_\_\_\_\_

12. What kinds of limitations, if any, do you believe the Research Office faces? (*please note all that apply*)

- Inadequate staffing
- Inadequate funding
- Inadequate support from sponsors
- Risk of no payoff
- Political considerations
- No significant limitations
- Other (*please specify*) \_\_\_\_\_

13. What is your *preferred* source of information about the research program? That is, how could the Research Office best keep in touch with you?

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Web page
- Conferences such as OTEC (*please specify*) \_\_\_\_\_
- Brochures
- External media (newspaper, TV, radio)
- Colleagues
- Other (*please specify*) \_\_\_\_\_

14. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

15. Do you feel that you have input into the research program at the project level?

- Yes
- No
- Not Sure / Don't Know

16. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

Thank you for your participation. Please return your responses via e-mail to [knott@ohio.edu](mailto:knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

#### 1.4 Technical Liaisons survey instrument

Dear ODOT Technical Liaison:

The Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or knott@ohio.edu.

Thank you for your participation. Please return your responses via e-mail to knott@ohio.edu, fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

1. What is your working title (e.g., project engineer) *(optional)*?
  
2. What is your work classification (e.g., TE 3)?
  
3. In what division/office are you employed?
  
4. How many years have you been employed in your current position?
  
5. To what degree would you say you are involved in the research program?
  - \_\_\_\_\_ Very involved *(Go to 5a)*
  - \_\_\_\_\_ Somewhat involved *(Go to 5a)*
  - \_\_\_\_\_ Not very involved *(Go to 5b)*
  - \_\_\_\_\_ Not at all involved *(Go to 5b)*
  
- 5a. In what ways are you involved? *(please select all that apply)*
  - \_\_\_\_\_ Project monitor
  - \_\_\_\_\_ Supplied research needs/project ideas
  - \_\_\_\_\_ Implementation of a product of the research program
  - \_\_\_\_\_ Reviewed research proposals being considered for funding
  - \_\_\_\_\_ Reviewed final reports
  - \_\_\_\_\_ Other *(please specify)* \_\_\_\_\_
  
- 5b. What is the main reason for your lack of involvement?

6. What is your motivation for being involved in the research program? *(please select all that apply)*
- Part of my job description
  - To extend my knowledge in my field
  - To interact with researchers and engage in different activities
  - To provide solutions to technical problems relating to my unit
  - Other (please specify) \_\_\_\_\_
7. What do you like most about being involved in the research program?
8. What do you like least?
9. How has your involvement enhanced your professional development?
10. How has your involvement improved the efficiency or effectiveness of your job or program?
11. Regardless of your level of involvement, please rate the following activities you EXPECT from the research program. (please rate)  
0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.
- To solve problems for constituents
  - To attain national recognition for Ohio and ODOT
  - To serve as a technical resource
  - To seek out or propose ways to improve ODOT activities
  - To compile best practices from peers and other organizations and share them with ODOT personnel
  - Other *(please specify)* \_\_\_\_\_
12. Please rate the following ODOT research program stake holders according to level of priority.  
*please rate)*  
0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.
- The research community
  - ODOT engineers
  - ODOT managers
  - The traveling public
  - Other DOTs
  - Particular unit(s) or division(s) within ODOT *(specify)*
  - Other *(please specify)* \_\_\_\_\_

13. Which of the following statements best describes the extent to which your expectations are being met?
- Research regularly meets my/my department's expectations  
 Research sometimes meets my/my department's expectations  
 The Research Program is helping other constituents but not me/my department  
 Research is off on its own, doing its own thing and is not much help to anyone
14. How do you learn of research program projects or activities? (please note all that apply)
- Transcript* newsletter  
 *Moving Forward* research newsletter  
 IOCs / Letters  
 Intranet or e-mail  
 Internet or listservs  
 Web page  
 Conferences such as OTEC (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio) (*please specify*) \_\_\_\_\_  
 Colleague (*please specify type*) \_\_\_\_\_  
 Researchers (*please specify type*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_
15. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?
- Yes  
 No  
 Sometimes  
 Don't Know / Not Applicable
16. Are you aware of any research program activities that resulted in the following:
- Personnel cost savings (*please specify*) \_\_\_\_\_  
 Other cost savings (*please specify*) \_\_\_\_\_  
 Safety improvements (*please specify*) \_\_\_\_\_  
 Quality improvements (*please specify*) \_\_\_\_\_  
 Better materials (*please specify*) \_\_\_\_\_  
 Better methods (*please specify*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_
17. Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.
- SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

17a. If so, how did you hear of them? *(please note all that apply)*

- Transcript* newsletter
- Moving Forward* research newsletter
- Memoranda / Letters
- Intranet or e-mail
- Internet or listservs
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleague
- Other *(please specify)* \_\_\_\_\_

18. What kinds of limitations, if any, do you believe the Research Office faces? *(please note all that apply)*

- Inadequate staffing
- Inadequate funding
- Inadequate support from sponsors
- Risk of no payoff
- Political considerations
- No significant limitations
- Other *(please specify)* \_\_\_\_\_

19. What is your preferred source of information about the research program? That is, how could the Research Office best keep in touch with you?

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Web page
- Conferences such as OTEC *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleagues
- Other *(please specify)* \_\_\_\_\_

20. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

21. Do you feel that you have input into the research program at the project level?

- Yes
- No
- Not Sure / Don't Know

22. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

23. Finally, please take a moment to consider—and then list—any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses to Dr. Knott via the postage-paid envelope or fax them to 740-593-2592.

### 1.5 District Deputy Directors survey instrument

August 8, 2003

Dear ODOT District Deputy Director:

The Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. Your views are very important to us, and your responses will be kept anonymous. Please note that your participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Please complete the survey as soon as possible and fax it to Dr. Diana Knott at 740-593-2592 or mail it to Dr. Knott, 102 Scripps Hall, Athens, OH 45701.

Should you have questions regarding this project, please contact Diana Knott at 740-597-1294 or knott@ohio.edu.

1. What is your working title (e.g., project engineer) (*optional*)?
2. What is your work classification (e.g., TE 3)?
3. In what division/office are you employed?

4. How many years have you been employed in your current position?

5. To what degree would you say you are involved in the research program?

- Very involved (Go to 5a)
- Somewhat involved (Go to 5a)
- Not very involved (Go to 5b)
- Not at all involved (Go to 5b)

5a. In what ways are you involved? *(please select all that apply)*

- Project monitor
- Supplied research needs/project ideas
- Implementation of a product of the research program
- Reviewed research proposals being considered for funding
- Reviewed final reports
- Other *(please specify)* \_\_\_\_\_

5b. What is the main reason for your lack of involvement?

6. Regardless of your level of involvement, please rate the following activities you EXPECT from the research program. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other *(please specify)* \_\_\_\_\_

7. Which of the following statements best describes the extent to which your expectations are being met?

- Research regularly meets my/my department's expectations
- Research sometimes meets my/my department's expectations
- The Research Program is helping other constituents but not me/my department
- Research is off on its own, doing its own thing and is not much help to anyone

8. How do you learn of research program projects or activities? *(note all that apply)*
- Transcript* newsletter
  - Moving Forward* research newsletter
  - IOCs / Letters
  - Intranet or e-mail
  - Internet or listservs
  - Web page
  - Conferences such as OTEC *(please specify)* \_\_\_\_\_
  - Brochures
  - Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_
  - Colleague *(please specify type)* \_\_\_\_\_
  - Researchers *(please specify type)* \_\_\_\_\_
  - Other *(please specify)* \_\_\_\_\_
9. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?
- Yes
  - No
  - Sometimes
  - Don't Know / Not Applicable
10. Are you aware of any research program activities that resulted in the following:
- Personnel cost savings *(please specify)* \_\_\_\_\_
  - Other cost savings *(please specify)* \_\_\_\_\_
  - Safety improvements *(please specify)* \_\_\_\_\_
  - Quality improvements *(please specify)* \_\_\_\_\_
  - Better materials *(please specify)* \_\_\_\_\_
  - Better methods *(please specify)* \_\_\_\_\_
  - Other *(please specify)* \_\_\_\_\_
11. Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.
- SHRP Pavement Project on Delaware 23
  - Ohio Freight Study
  - Evaluation of Warranty Provisions on ODOT Construction Projects
  - Evaluation of Drainable Bases Under Asphalt Pavement
  - Development of Crash Reduction Techniques
  - Innovative Bridge Design Construction Techniques to Expedite Construction
  - Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

11a. If so, how did you hear of them? (please note all that apply)

- Transcript* newsletter
- Moving Forward* research newsletter
- Memoranda / Letters
- Intranet or e-mail
- Internet or listservs
- Web page
- Conferences (*please specify*) \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleague
- Other (*please specify*) \_\_\_\_\_

12. What kinds of limitations, if any, do you believe the Research Office faces? (*please note all that apply*)

- Inadequate staffing
- Inadequate funding
- Inadequate support from sponsors
- Risk of no payoff
- Political considerations
- No significant limitations
- Other (*please specify*) \_\_\_\_\_

13. What is your preferred source of information about the research program? That is, how could the Research Office best keep in touch with you?

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Web page
- Conferences such as OTEC (*please specify*) \_\_\_\_\_
- Brochures
- External media (newspaper, TV, radio)
- Colleagues
- Other (*please specify*) \_\_\_\_\_

14. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

15. Do you feel that you have input into the research program at the project level?

- Yes
- No
- Not Sure / Don't Know

16. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

Thank you for your participation. Please return your responses via e-mail to [knott@ohio.edu](mailto:knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

### 1.6 District Research Offices survey instrument

August 8, 2003

Dear ODOT District Research Contact:

The Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. Your views are very important to us, and your responses will be kept anonymous. Please note that your participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or [knott@ohio.edu](mailto:knott@ohio.edu).

Thank you for your participation. Please return your responses via the enclosed postage-paid envelope or fax them to Dr. Knott at 740-593-2592.

1. What is your working title (e.g., project engineer) (*optional*)?
2. What is your work classification (e.g., TE 3)?
3. In what division/office are you employed?
4. How many years have you been employed in your current position?

5. To what degree would you say you are involved in the research program?

- Very involved (*Go to 5a*)  
 Somewhat involved (*Go to 5a*)  
 Not very involved (*Go to 5b*)  
 Not at all involved (*Go to 5b*)

5a. In what ways are you involved? (*please select all that apply*)

- Project monitor  
 Supplied research needs/project ideas  
 Implementation of a product of the research program  
 Reviewed research proposals being considered for funding  
 Reviewed final reports  
 Other (*please specify*) \_\_\_\_\_

5b. What is the main reason for your lack of involvement?

6. What is your motivation for being involved in the research program? (*please select all that apply*)

- Part of my job description  
 To extend my knowledge in my field  
 To interact with researchers and engage in different activities  
 To provide solutions to technical problems relating to my unit  
 Other (*please specify*) \_\_\_\_\_

7. What do you like most about being involved in the research program?

8. What do you like least?

9. How has your involvement enhanced your professional development?

10. How has your involvement improved the efficiency or effectiveness of your job or program?

11. Regardless of your level of involvement, please rate the following activities you EXPECT from the research program. (*please rate*)

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.

- To solve problems for constituents  
 To attain national recognition for Ohio and ODOT  
 To serve as a technical resource  
 To seek out or propose ways to improve ODOT activities  
 To compile best practices from peers and other organizations and share them with ODOT personnel  
 Other (*please specify*) \_\_\_\_\_

12. Please rate the following ODOT research program stake holders according to level of priority.  
(*please rate*)  
0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.
- The research community
  - ODOT engineers
  - ODOT managers
  - The traveling public
  - Other DOTs
  - Particular unit(s) or division(s) within ODOT (*specify*) \_\_\_\_\_
  - Other (*please specify*) \_\_\_\_\_
13. Which of the following statements best describes the extent to which your expectations are being met?
- Research regularly meets my/my department's expectations
  - Research sometimes meets my/my department's expectations
  - The Research Program is helping other constituents but not me/my department
  - Research is off on its own, doing its own thing and is not much help to anyone
14. How do you learn of research program projects or activities? (please note all that apply)
- Transcript* newsletter
  - Moving Forward* research newsletter
  - IOCs / Letters
  - Intranet or e-mail
  - Internet or listservs
  - Web page
  - Conferences such as OTEC (*please specify*) \_\_\_\_\_
  - Brochures
  - Media (newspaper, TV, radio) (*please specify*) \_\_\_\_\_
  - Colleague (*please specify type*) \_\_\_\_\_
  - Researchers (*please specify type*) \_\_\_\_\_
  - Other (*please specify*) \_\_\_\_\_
15. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?
- Yes
  - No
  - Sometimes
  - Don't Know / Not Applicable
16. Are you aware of any research program activities that resulted in the following:
- Personnel cost savings (*please specify*) \_\_\_\_\_
  - Other cost savings (*please specify*) \_\_\_\_\_
  - Safety improvements (*please specify*) \_\_\_\_\_
  - Quality improvements (*please specify*) \_\_\_\_\_
  - Better materials (*please specify*) \_\_\_\_\_
  - Better methods (*please specify*) \_\_\_\_\_
  - Other (*please specify*) \_\_\_\_\_

17. Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.

- SHRP Pavement Project on Delaware 23
- Ohio Freight Study
- Evaluation of Warranty Provisions on ODOT Construction Projects
- Evaluation of Drainable Bases Under Asphalt Pavement
- Development of Crash Reduction Techniques
- Innovative Bridge Design Construction Techniques to Expedite Construction
- Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

17a. If so, how did you hear of them? *(please note all that apply)*

- Transcript* newsletter
- Moving Forward* research newsletter
- Memoranda / Letters
- Intranet or e-mail
- Internet or listservs
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleague
- Other *(please specify)* \_\_\_\_\_

18. What kinds of limitations, if any, do you believe the Research Office faces? *(please note all that apply)*

- Inadequate staffing
- Inadequate funding
- Inadequate support from sponsors
- Risk of no payoff
- Political considerations
- No significant limitations
- Other *(please specify)* \_\_\_\_\_

19. What is your preferred source of information about the research program? That is, how could the Research Office best keep in touch with you?

- Transcript* newsletter
- Moving Forward* research newsletter
- IOCs / Letters
- Intranet or e-mail
- Web page
- Conferences such as OTEC *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleagues
- Other *(please specify)* \_\_\_\_\_

20. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

21. Do you feel that you have input into the research program at the project level?

- Yes
- No
- Not Sure / Don't Know

22. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

23. Finally, please take a moment to consider—and then list—any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses via e-mail to [knott@ohio.edu](mailto:knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

## Chapter 2: Key Survey Findings

### 2.1 Administrators/Directors (largely involved) key findings

N = 5 / 20 = 25% response

Survey conducted August 2003

#### *Key Summary Findings (complete survey results appear in Appendix A)*

100% in position five or fewer years

60% report at least somewhat involved in the research program; 40% not very involved

Ways reported to be involved:

- 60% report supplied research/project ideas
- 60% report reviewed research proposals
- 40% report reviewed final reports

Main reason for lack of involvement:

Lack of time

Motivation for involvement in project:

- 60% to provide solutions to technical problems relating to my unit
- 40% part of job description
- 40% to interact with researchers

What do you like most about being involved in the research program?

- 70% addressing technical issues/implementing solutions

What do you like least?

- 40% slow implementation

How has your involvement in research program enhanced your professional development?

- 20% recognize the ROI on all research
- 20% report it allows us to get involved in all areas of the department; research doesn't occur in a vacuum
- 20% report increased knowledge, new technology
- 20% report allows them to team up with others to advance knowledge and improve practices

How has your involvement improved efficiency/effectiveness of your job/program?

- 20% say can explore opportunities to save the department money
- 20% enhanced design procedures
- 20% prepare local jurisdictions for the impact outcomes may have on their decision-making

## Rating priority of different activities:

- 100% believe seeking out ways to improve ODOT activities is a high priority
- 80% report at least somewhat a priority to solve problems for constituents
- 80% believe compiling best practices from others to share is at least somewhat of a priority
- 60% report serving as technical resource is at least somewhat of a priority
- None believe attaining national recognition is a priority at all

## Rating stakeholders:

- 80% report ODOT engineers at least somewhat of a priority
- 80% report ODOT managers are at least somewhat of a priority
- 60% report traveling public is at least somewhat of a priority
- 60% report other DOTs at least somewhat of a priority
- 20% believe the research community is somewhat of a priority
- 60% of respondents report the research office at least sometimes meeting their expectations

## In terms of knowing about the research program, how do you get your info?

- 60% report they learn of it through personal involvement, word of mouth
- 40% from *Moving Forward*
- 40% from IOCs/letters
- 40% from conferences such as OTEC
- 20% from *Transcript*
- 20% from e-mail
- None from the Web page, brochures, media, colleagues, researchers

60% report the Research Office is accessible (easy to contact, responds to inquiries)

Another 20% report sometimes accessible

Another 20% report not applicable

## No respondents were aware of the following program outcomes:

- cost savings
- safety improvement
- better materials
- better methods
- 20% aware of quality improvement; bridge design to expedite construction

## Heard of the following projects:

- 80% had heard of SHRP pavement project on Delaware 23
- 60% had heard of Ohio Freight Study
- 60% had heard of Wavluation of Warranty Provisions on ODOT Construction Projects
- 60% had heard of evaluation of Drainable Bases Under Asphalt Pavement
- 60% had heard of Innovative Bridge design Consturction Techniques to Expedite Consturction
- 60% had heard of Comparison and Definition of State DOT's practices in Selection of Materials for Pavements
- 40% had heard of Development of Crash Reduction Techniques

## How would you like to hear of these activities/projects?

- The only ones listed were the following:
- 60% said conferences (one specified OTEC)
- 40% said colleagues
- 40% said word of mouth, personal involvement
- 20% said brochures

Regarding perceived limitations of the research office:

- 40% report inadequate support from sponsors
- 40% report risk of no payoff
- 20% report inadequate staffing; inadequate funding
- 20% report no significant limitations to program

Preferred source of receiving info about research program:

- 40% report *Moving Forward*
- 40% report e-mail
- 40% report Web page
- 20% report *Transcript*, IOCs/letters; conferences; brochures; media

40% of respondents said they feel as if they are part of the research program's strategic planning process.

40% also report they have input into the program at the project level; 20% report not sure

Types of research activities most interested in knowing about:

- 80% report technical innovations
- 60% report Ohio's success stories
- 60% report implementation
- 40% report Requests for Proposals
- 40% report best practices
- 20% report technology transfer; research management process; strategic research plan; training opportunities

Others who may be interested in or value products of research program:

- ODOT district administrators
- Ohio engineering consultants
- Counties, cities, villages and townships

## **2.2 Administrators/Directors (not largely involved) key findings**

N = 5 /12 =42% response

Survey conducted August 2003

### ***Key Summary Findings (complete survey results appear in Appendix B)***

40% in position five or fewer years

20% six to ten years

20% eleven to 15 years

20% more than 15 years

40% report at least somewhat involved in the research program; 60% not very involved

Ways reported to be involved:

- 40% report supplied research/project ideas
- 40% report reviewed research proposals
- 20% project manager
- 20% report reviewed final reports

Main reason for lack of involvement:

Not part of job

Rating priority of different activities:

- 100% believe seeking out ways to improve ODOT activities is at least somewhat of a priority
- 80% believe compiling best practices from others to share is at least somewhat of a priority
- 60% report at least somewhat a priority to solve problems for constituents
- 60% report serving as technical resource is at least somewhat of a priority
- None believe attaining national recognition is a priority at all

40% of respondents report the research office as sometimes meeting their expectations

In terms of knowing about the research program, how do you get your info?

- 80% from IOCs/letters
- 60% from *Transcript*
- 40% from conferences such as OTEC
- 40% from e-mail
- 40% report they learn of it through personal involvement
- 20% from *Moving Forward*
- 20% from the Web page
- 20% from colleagues
- None from brochures, media, researchers

60% report the Research Office is accessible (easy to contact, responds to inquiries)

Another 40% report not applicable

Respondents were aware of the following program outcomes:

- 60% of better materials
- 60% of better methods
- 40% of personnel cost savings
- 40% of other cost savings
- 40% of quality improvement
- 20% of safety improvement

Heard of the following projects:

- 100% had heard of SHRP pavement project on Delaware 23
- 100% had heard of Ohio Freight Study
- 100% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 100% had heard of Development of Crash Reduction Techniques
- 100% had heard of Innovative Bridge Design Construction Techniques to Expedite Construction
- 80% had heard of Comparison and Definition of State DOT's practices in Selection of Materials for Pavements
- 20% had heard of Evaluation of Drainable Bases Under Asphalt Pavement

How heard of these activities/projects?

- The only ones listed were the following:
- 60% said *Transcript*
- 40% said memos/letters
- 40% said colleagues
- 20% said *Moving Forward*
- 20% said e-mail
- 20% said listservs
- 20% said Web page
- 20% said media
- 20% said meetings

Regarding perceived limitations of the research office:

- 20% report inadequate support from sponsors
- 20% report difficult process
- 40% report no significant limitations to program

Preferred source of receiving info about research program:

- 40% report IOCs/letters
- 40% report meetings
- 20% report *Transcript*
- 20% report *Moving Forward*
- 20% report conferences such as OTEC

60% of respondents said they feel as if they are part of the research program's strategic planning process.

40% also report they have input into the program at the project level

Types of research activities most interested in knowing about:

- 60% report best practices
- 40% report training opportunities
- 20% report Ohio's success stories
- 20% report technical innovations
- 20% report technology transfer
- 20% report research management process
- 20% report strategic research plan
- 20% report implementation

### 2.3 Technical Liaisons key findings

N = 13 / 44 = 29% response

Survey conducted August 2003

*Key Summary Findings (complete survey results appear in Appendix C)*

Work Classification: 54% are TE 4s

- 46% of all respondents have been in their position fewer than five years
- 15% have been in their position six to ten years
- 38% have been in their position eleven to fifteen years

92% report at least somewhat involved in the research program

Ways reported to be involved:

- 77% project monitor
- 77% report supplied research/project ideas
- 54% report implementation of a product
- 92% report reviewed research proposals
- 77% report reviewed final reports

Main reason for lack of involvement:

Lack of time

Motivation for involvement in project:

- 100% to provide solutions to technical problems
- 69% to extend knowledge of the field
- 54% to interact with researchers
- 31% part of job description

Other:

- advance knowledge nationally
- exposure to new ideas
- ensure using best available methods

What do you like most about being involved in the research program?

- 31% solve problems/apply solutions
- 46% interact with researchers

What do you like least?

- 31% bureaucracy/red tape
- 31% amount of time needed to track/work with researchers and amount of time to solve problems
- 15% paper work

How has your involvement in research program enhanced your professional development?

- 38% knowledge and contacts
- 15% better understanding of the job

How has your involvement improved efficiency/effectiveness of your job/program?

- 62% indicated some improvement in products, safety, decision-making, tools, performance
- 31% indicated it provides answers

Rating priority of different activities:

- 69% believe seeking out ways to improve ODOT activities is a high priority
- 77% report at least somewhat a priority to solve problems for constituents
- 77% believe compiling best practices from others to share is at least somewhat of a priority
- 69% report serving as technical resource is at least somewhat of a priority
- 31% believe attaining national recognition is somewhat of a priority

Rating stakeholders:

- 23% report particular ODOT units/divisions at least somewhat of a priority
- 77% report ODOT engineers at least somewhat of a priority
- 69% report ODOT managers are at least somewhat of a priority
- 54% report traveling public is at least somewhat of a priority
- 38% report other DOTs at least somewhat of a priority
- 15% believe the research community is high priority
- 84% of respondents report the research office at least sometimes meeting their expectations

In terms of knowing about the research program, how do you get your info?

- 77% from conferences such as OTEC (some also noted TRB, ICOET)
- 46% from e-mail
- 31% from IOCs/letters
- 31% from colleagues
- 23% from *Transcript*
- 23% from researchers
- 15% from *Moving Forward*
- 8% from Internet or listservs
- 8% from Web page
- 8% from brochures,
- none from media

69% report the Research Office is accessible (easy to contact, responds to inquiries)

- Another 23% report it is sometimes accessible

Respondents indicated being aware of the following program outcomes:

- 46% quality improvement
- 38% other cost savings
- included construction costs, materials, drilled shaft lateral load
- included asphalt, PCC QC/QA specs, materials, impact analysis
- 38% better materials
- included asphalt, BMPs for stormwater, mix design, polymer binders
- 38% better methods
- included asphalt, BMPs for stormwater, design, applications
- 8% safety improvement
- No respondents were aware of personnel cost savings

Heard of the following projects:

- 100% had heard of SHRP pavement project on Delaware 23
- 54% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 38% had heard of Ohio Freight Study
- 31% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 31% had heard of Comparison and Definition of State DOT's practices in Selection of Materials for Pavements
- 23% had heard of Innovative Bridge Design Construction Techniques to Expedite Construction
- None had heard of Development of Crash Reduction Techniques

How did you hear of these activities/projects?

- The only ones listed were the following:
- 46% said colleagues
- 38% said e-mail
- 31% said *Transcript*
- 23% said personal involvement
- 15% said memoranda/letters
- 8% said *Moving Forward*
- 8% said Web page
- 8% said conferences (specified OTEC)

Regarding perceived limitations of the research office:

- 31% report risk of no payoff
- 31% report inadequate staffing
- 23% report inadequate funding
- 15% report inadequate support from sponsors
- 15% report no significant limitations to program
- 8% political considerations
- Other reported limitations:
- Time, contacting people, lack of experience

Preferred source of receiving info about research program:

- 38% report Web page
- 31% report conferences such as OTEC
- 23% report colleagues
- 62% report e-mail
- 23% report IOCs/letters
- 23% report other:
- internal forums, office involvement
- 15% report *Moving Forward*
- 15% report *Transcript*

54% of respondents said they feel as if they are part of the research program's strategic planning process; 23% not sure.

100% also report they have input into the program at the project level

Types of research activities most interested in knowing about:

- 69% report technical innovations
- 61% report best practices
- 54% report implementation
- 54% report technology transfer
- 46% report strategic research plan
- 31% report Requests for Proposals
- 23% report Ohio's success stories
- 23% report research management process
- 8% report training opportunities

Others who may be interested in or value products of research program:

- ODOT consultants
- District offices
- Soil consultants
- Other state DOTs
- Trade organizations (members sometimes serve on project panels)
- FHWA Washington, DC, office
- Academia
- The public (have given several presentations to groups and found they're very interested in research)
- Staff members of the Office of Roadway Engineering

#### 2.4 District Deputy Directors key findings

N = 5/12 = 42% response

Survey conducted August 2003

*Key Summary Findings (complete survey results appear in Appendix D)*

100% in position fewer than seven years

40% report somewhat involved in the research program; 60% not very involved

Ways reported to be involved:

- 20% report supplied research/project ideas
- 20% report project monitor

Rating priority of different activities:

- 100% believe seeking out ways to improve ODOT activities is at least somewhat of a priority
- 60% report serving as technical resource is at least somewhat of a priority
- 60% believe compiling best practices from others to share is at least somewhat of a priority
- 40% report at least somewhat a priority to solve problems for constituents

100% of respondents report the research office at least sometimes meeting their expectations

In terms of knowing about the research program, how do you get your info?

- 80% from IOCs/letters
- 80% from conferences such as OTEC (OTEC, Nat'l Composite Technology)
- 60% from *Transcript*
- 60% from colleagues
- 40% from *Moving Forward*
- 40% from researchers (FHWA, reports)
- 20% from e-mail
- 20% from listservs
- 20% from Web page
- 20% from media (newspapers)

100% report the Research Office is accessible (easy to contact, responds to inquiries)

Respondents were aware of the following program outcomes:

- 40% aware of quality improvement (better bridge)
- 20% of cost savings (orange lights removed from barrels)
- 20% of safety improvement (bridge monitoring)
- 20% better materials (superpave, SHRP)
- 20% better methods (ease of bridge replacement)
- 20% aware of bridge design to expedite construction

Heard of the following projects:

- 100% had heard of Ohio Freight Study
- 100% had heard of Innovative Bridge design Construction Techniques to Expedite Construction
- 60% had heard of SHRP pavement project on Delaware 23
- 60% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 60% had heard of Comparison and Definition of State DOT's practices in Selection of Materials for Pavements
- 40% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 40% had heard of Development of Crash Reduction Techniques

How did you hear of these activities/projects?

- 80% said *Transcript*
- 80% said IOCs/letters
- 80% said conferences (OTEC)
- 40% said colleagues
- 20% said e-mail
- 20% said word of mouth

Regarding perceived limitations of the research office:

- 60% report no significant limitations to program
- 20% report risk of no payoff

Preferred source of receiving info about research program:

- 60% report *Transcript*
- 40% report brief reports
- 20% report *Moving Forward*
- 20% report IOCs/letters
- 20% report e-mail
- 20% report Web page
- 20% report conferences such as OTEC
- 20% report brochures

20% of respondents said they feel as if they are part of the research program's strategic planning process;  
40% said don't know, not sure

60% also report they have input into the program at the project level; 40% report not sure

Types of research activities most interested in knowing about:

- 80% report Ohio's success stories
- 80% report best practices
- 60% report technical innovations
- 20% report Requests for Proposals; technology transfer; strategic research plan; implementation

## 2.5 District Research Offices key findings

N = 5 / 12 = 42% response

Survey conducted August 2003

### *Key Summary Findings (complete survey results appear in Appendix E)*

100% in position six or fewer years

60% report at least somewhat involved in the research program; 40% not very involved

Ways reported to be involved:

- 60% report project monitor
- 40% supplied research/project ideas
- 40% report reviewed research proposals
- 40% report reviewed final reports
- 20% report implementation of research program product

Main reason for lack of involvement:

- 20% report lack of time
- 20% report not main job priority

Motivation for involvement in project:

- 60% to provide solutions to technical problems relating to my unit
- 60% to extend knowledge in the field
- 60% to provide solutions to technical problems
- 20% to interact with researchers
- 20% to save taxpayers money
- 20% to test new products
- 20% to ensure local needs are included in research projects

What do you like most about being involved in the research program?

- 40% to solve problems
- 40% to increase knowledge

What do you like least?

- 20% slow implementation
- 20% don't see the link between research and ODOT practices
- 20% report useless research products

How has your involvement in research program enhanced your professional development?

- 100% report it has enhanced their development
- 60% specified increased knowledge

How has your involvement improved efficiency/effectiveness of your job/program?

- 20% provided a better product
- 20% said bridge remained open to public

## Rating priority of different activities:

- 100% believe seeking out ways to improve ODOT activities is at least a high priority
- 100% believe compiling best practices from others to share is at least a high priority
- 80% report serving as technical resource is at least somewhat of a priority
- 80% report at least somewhat a priority to solve problems for constituents
- 40% believe attaining national recognition is somewhat of a priority
- 20% report finding products to stretch resources

## Rating stakeholders:

- 100% report research community as at least somewhat of a priority
- 100% report ODOT engineers at least somewhat of a priority
- 100% report ODOT managers are at least somewhat of a priority
- 40% report traveling public is a high priority
- 60% report other DOTs at least somewhat of a priority
- 60% report particular units/divisions within ODOT at least a high priority

60% of respondents report the research office at least sometimes meeting their expectations

## In terms of knowing about the research program, how do you get your info?

- 60% from conferences such as OTEC
- 40% from *Transcript*
- 40% from IOCs/letters
- 20% from *Moving Forward*
- 20% from e-mail
- 20% from Web page
- 20% from media
- 20% from colleagues
- 20% from researchers
- 20% from technical magazines
- 20% from circulated research reports
- 20% from personal involvement

60% report the Research Office is accessible (easy to contact, responds to inquiries); 40% report not applicable, don't know

## Respondents were aware of the following program outcomes:

- 40% of better materials (SHRP, superpave)
- 20% of personnel cost savings
- 20% of other cost savings
- 20% of safety improvement (bridge monitoring)
- 20% of quality improvement
- 20% of better methods
- 20% savings to public through expedited bridge construction

## Heard of the following projects:

- 100% had heard of SHRP pavement project on Delaware 23
- 80% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 80% had heard of Innovative Bridge design Construction Techniques to Expedite Construction
- 60% had heard of Ohio Freight Study
- 20% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 40% had heard of Comparison and Definition of State DOT's practices in Selection of Materials for Pavements
- 20% had heard of Development of Crash Reduction Techniques

How did you hear of these activities/projects?

- 80% said *Transcript*
- 80% said conferences (OTEC)
- 60% said memos/letters
- 60% said colleagues
- 20% said e-mail
- 20% said brochures
- 20% said media
- 20% said word of mouth

Regarding perceived limitations of the research office:

- 60% report risk of no payoff
- 60% report inadequate funding
- 20% report inadequate support from sponsors
- 20% report inadequate staffing
- 20% report political considerations
- 20% report no significant limitations to program

Preferred source of receiving info about research program:

- 40% report *Moving Forward*
- 40% report conferences such as OTEC
- 20% report *Transcript*
- 20% report IOCs/letters
- 20% report e-mail
- 20% report brochures
- 20% report colleagues
- 40% of respondents said they feel as if they are part of the research program's strategic planning process; 20% don't know

80% also report they have input into the program at the project level

Types of research activities most interested in knowing about:

- 80% report best practices
- 60% report technical innovations
- 60% report implementation
- 40% report Ohio's success stories
- 20% report Requests for Proposals
- 20% report technology transfer
- 20% report strategic research plan
- 20% report training opportunities

Others who may be interested in or value products of research program:

- Construction and maintenance fields
- Production, contractors, suppliers, schools, public info offices

**Appendix A**  
**Administrators/Directors (largely involved)**  
**Survey Results**

**Q1: What is your working title (e.g., project engineer)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Administrator	2	40.0	40.0	40.0
Assistant Administrator	1	20.0	20.0	60.0
Deputy Director	1	20.0	20.0	80.0
LTAP Director	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q2: What is your work classification (e.g., TE 3)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid DD 6	1	20.0	20.0	20.0
DD5	1	20.0	20.0	40.0
Deputy Director	1	20.0	20.0	60.0
TE 4	1	20.0	20.0	80.0
TE 5	1	20.0	20.0	100.0
Total	5	100.0	100.0	

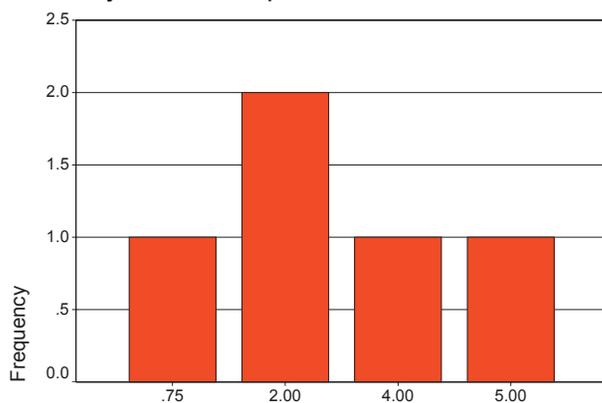
**Q3: In what division/office are you employed?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Division of Highway Operations/ Office of Structural Engineering	1	20.0	20.0	20.0
Division of Planning	1	20.0	20.0	40.0
Division of Planning/Office of Geotechnical Engineering	1	20.0	20.0	60.0
Division of Production Management, Office of Real Estate	1	20.0	20.0	80.0
Ohio Department of Transportation	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q4: How many years have you been employed in your current position?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .75	1	20.0	20.0	20.0
2.00	2	40.0	40.0	60.0
4.00	1	20.0	20.0	80.0
5.00	1	20.0	20.0	100.0
Total	5	100.0	100.0	

How many years have you been employed  
in your current position?



**Q5: To what degree would you say you are involved in the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 very involved	2	40.0	40.0	40.0
2 somewhat involved	1	20.0	20.0	60.0
3 not very involved	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q5A: In what way are you involved?**

**Q5A1 Project monitor**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	25.0	25.0
2 no	3	60.0	75.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q5A2 Supplied research needs/project ideas**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	75.0	75.0
2 no	1	20.0	25.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q5A3 Implementation of a product of the research program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	25.0	25.0
	2 no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5A4 Reviewed research proposals being considered for funding**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	60.0	75.0	75.0
	2 no	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5A5 Reviewed final reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	50.0	50.0
	2 no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5A6 Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	25.0	25.0
	2 no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

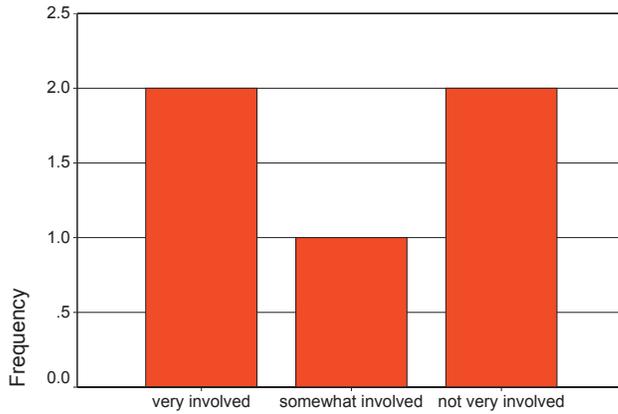
**Q5A7 Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	Management of Program	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

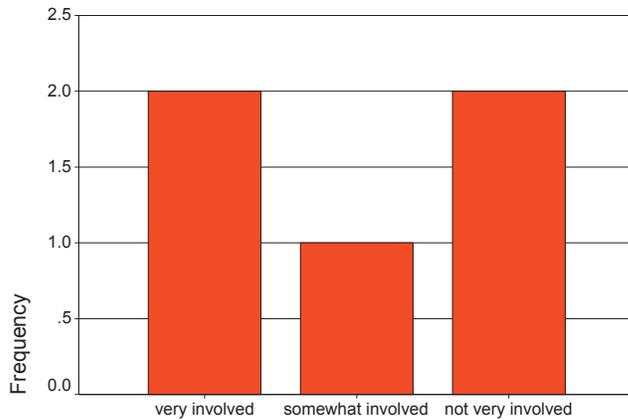
**Q5B What is the main reason for your lack of involvement?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
A "staff," including many engineers, do a lot of pre-review before the documents are given to the group I am with to make final recommendations	1	20.0	20.0	80.0
Lack of time, low on food chain, other priorities	1	20.0	20.0	100.0
Total	5	100.0	100.0	

To what degree would you say you are involved in the research program?

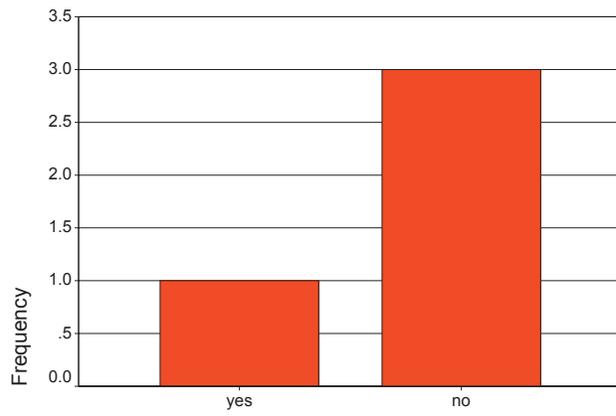


To what degree would you say you are involved in the research program?

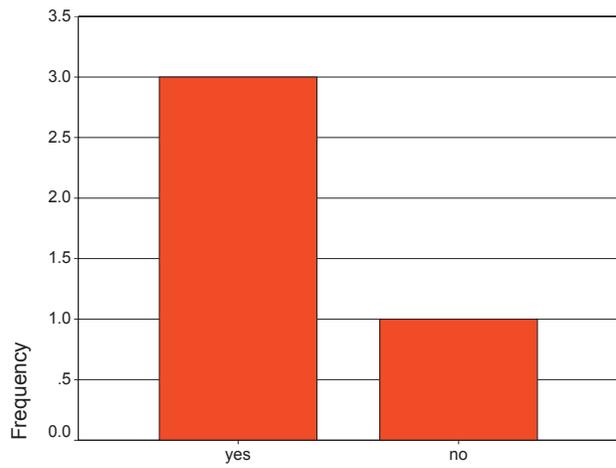


In what way are you involved?

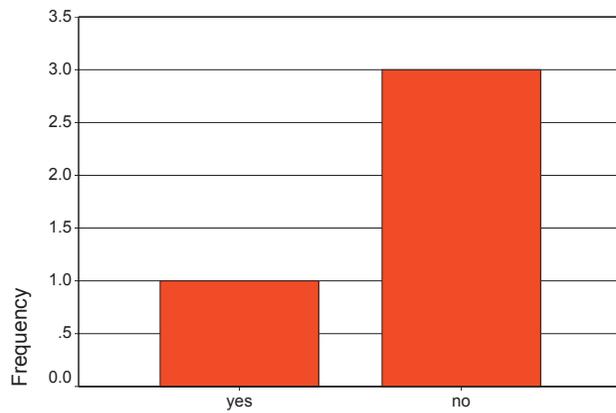
Project monitor



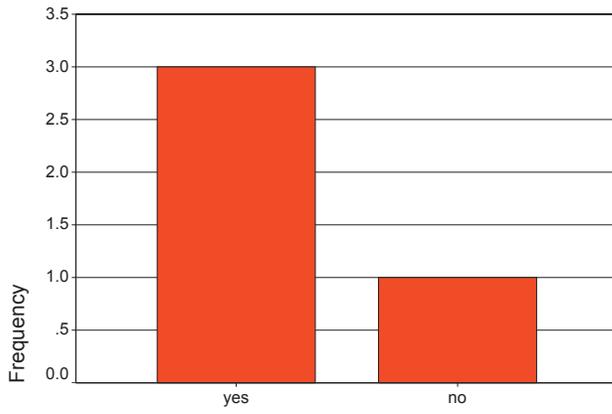
Supplied research needs/project ideas



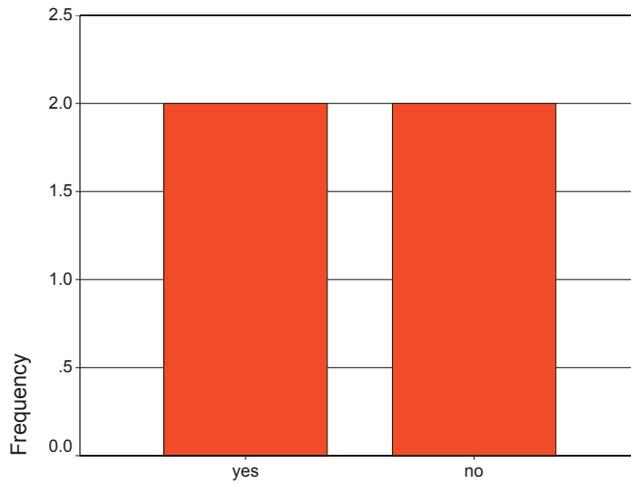
Implementation of a product  
of the research program



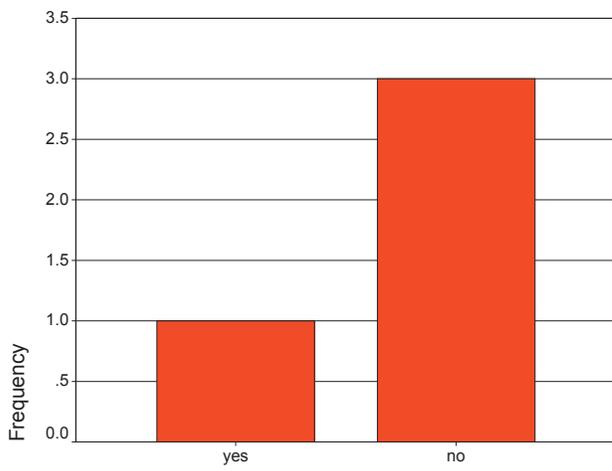
Reviewed research proposals  
being considered for funding

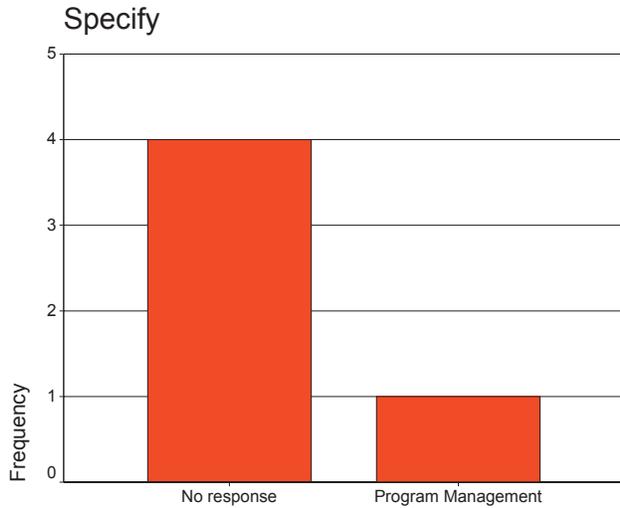


Reviewed final reports



Other





**Q6: What is your motivation for being involved in the research program?(please select all that apply)**

**Q6A Part of job description**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q6B To extend my knowledge in my field**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

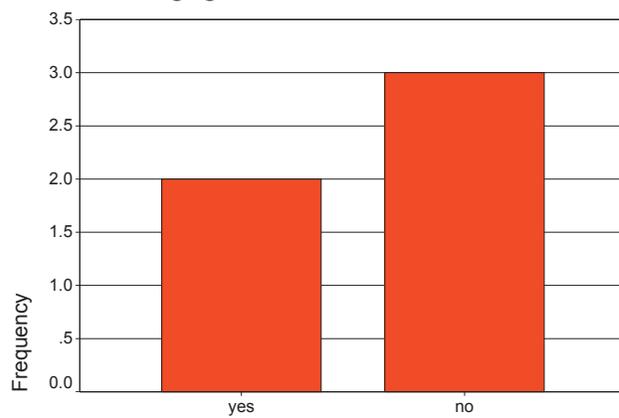
**Q6C To interact with researchers and engage in different activities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

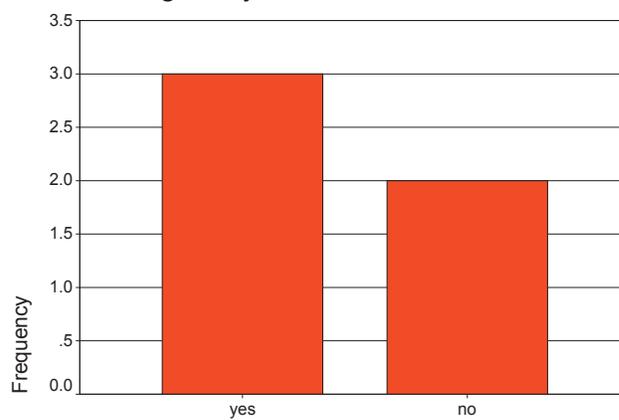
**Q6D To provide solutions to technical problems relating to my unit**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	60.0	60.0	60.0
	2 no	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

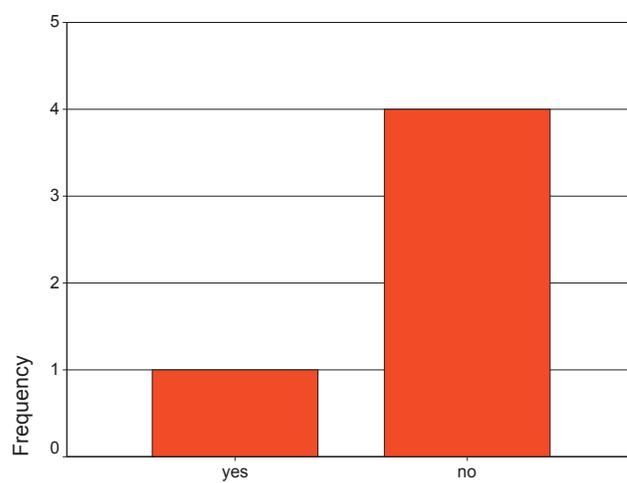
To interact with researchers  
and engage in different activities



To provide solutions to technical problems  
relating to my unit



Other



**Q7: What do you like most about being involved in the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Addressing complicated technical issues	1	20.0	20.0	20.0
Analyzing problems that will make the DOT operations more efficient and reliable, being able to implement new ideas that assist the department	1	20.0	20.0	40.0
It gives me a sense of what may be implementable in the short and long-term.	1	20.0	20.0	60.0
N/A	1	20.0	20.0	80.0
Technical knowledge, Implementation ideas	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q8: What do you like least?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Length of some of the studies	1	20.0	20.0	20.0
N/A	1	20.0	20.0	40.0
Process of administering somewhat inflexible	1	20.0	20.0	60.0
Research where the final report says more research is needed. Research for research sake!	1	20.0	20.0	80.0
Time consuming on the cost of other productive activities. Slow implementation	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q9: How has your involvement enhanced your professional development?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Allowed us to use ideas and conclusions from studies to get involved with all areas of the department. This demonstrates that research as well as other areas of the Department cannot operate in a vacuum.	1	20.0	20.0	20.0
I can't say it has. Involvement keeps one vigilant on outcomes and implementation. It also allows one to recognize the ROI for all research.	1	20.0	20.0	40.0
Increased knowldege, new technology	1	20.0	20.0	60.0
N/A	1	20.0	20.0	80.0
Team up with other individuals interested in advancing knowledge and improving practices	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q10: How has your involvement improved the efficiency or effectiveness of your job or program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Because I chair the ODOT funds management committee, I can explore opportunities to save the department money through the outcome of research projects.	1	20.0	20.0	20.0
Enhanced design procedures	1	20.0	20.0	40.0
I am able to identify and deliver projected outcomes from many research projects, thereby preparing the local jurisdictions for the impact this outcome could have on their decision-making related to future strategies.	1	20.0	20.0	60.0
N/A	1	20.0	20.0	80.0
Total	5	100.0	100.0	100.0

**Q11: Regardless of your level of involvement, please rate the following activities you expect from the research program. (please rate)**

**Q11A To solve problems for constituents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	20.0	20.0	20.0
2 somewhat priority	2	40.0	40.0	60.0
3 high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q11B To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	3	60.0	60.0	60.0
1 not a priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q11C To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	1	20.0	20.0	20.0
1 not a priority	1	20.0	20.0	40.0
2 somewhat priority	2	40.0	40.0	80.0
3 high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q11D To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3 high priority	5	100.0	100.0	100.0

**Q11E To compile best practices from peers and other organizations and share**

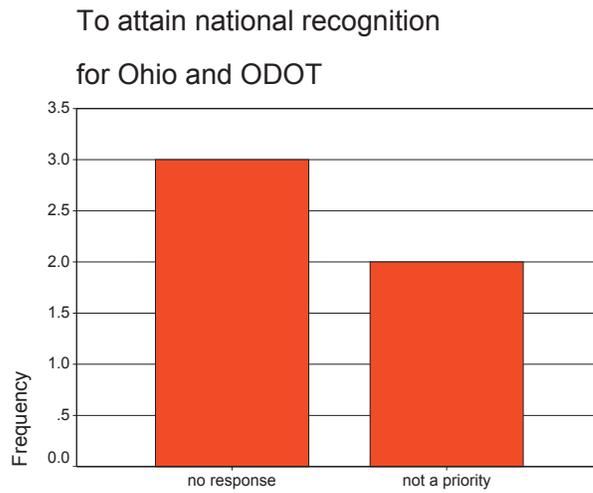
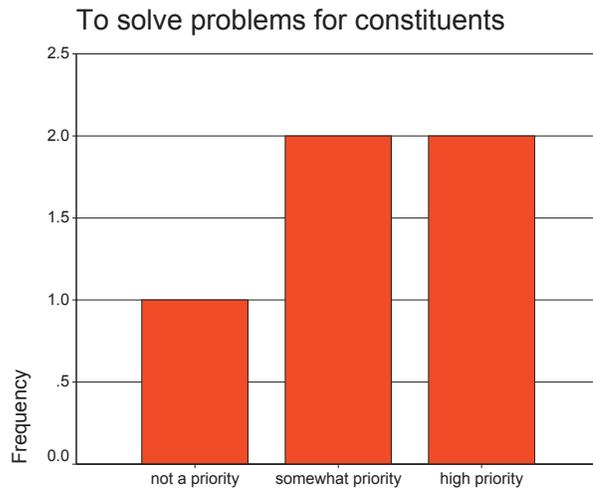
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	20.0	20.0	20.0
2 somewhat priority	1	20.0	20.0	40.0
3 high priority	3	60.0	60.0	100.0
Total	5	100.0	100.0	

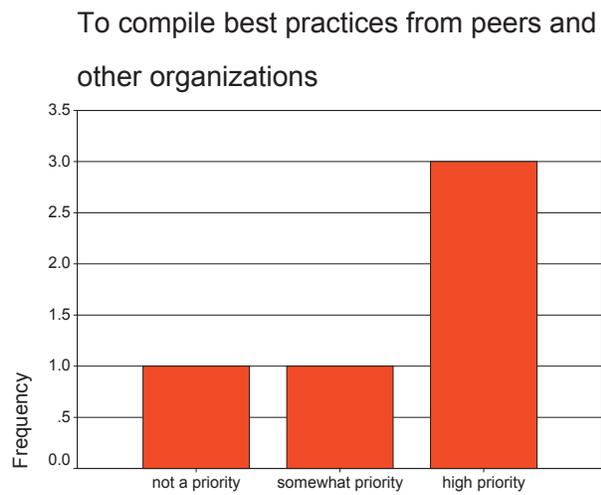
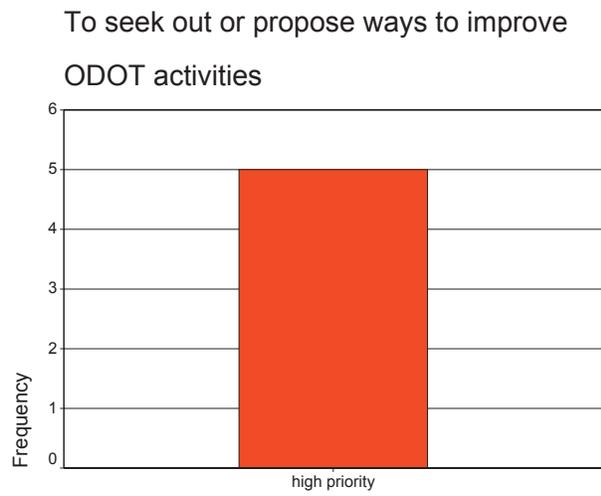
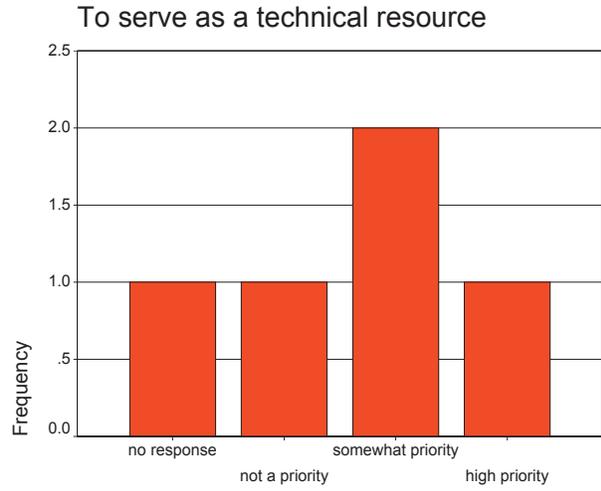
**Q11F Other**

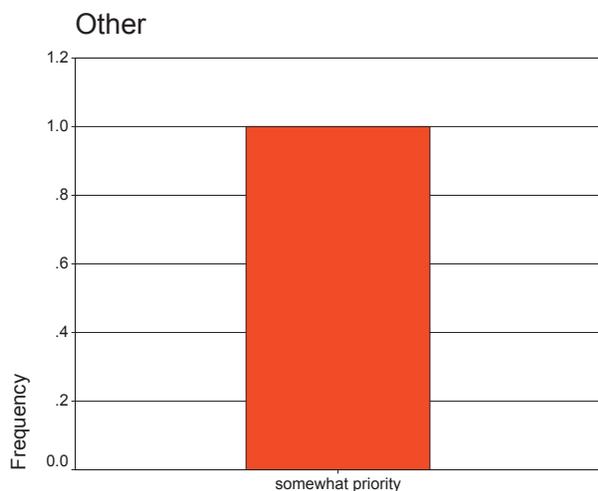
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 somewhat priority	1	20.0	100.0	100.0
Missing System	4	80.0		
Total	5	100.0		

**Q11G Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0







**Q12: Please rate the following ODOT research program stake holders according to level of priority. (please rate)**

**Q12A The research community**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	3	60.0	75.0	75.0
2 somewhat priority	1	20.0	25.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q12B ODOT engineers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	20.0	20.0	20.0
2 somewhat priority	1	20.0	20.0	40.0
3 high priority	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q12C ODOT managers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	20.0	20.0	20.0
2 somewhat priority	1	20.0	20.0	40.0
3 high priority	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q12D The traveling public**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	2	40.0	40.0	40.0
2 somewhat priority	1	20.0	20.0	60.0
3 high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q12E Other DOTs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	2	40.0	40.0	40.0
2 somewhat priority	2	40.0	40.0	80.0
3 high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q12F Particular unit(s) or division(s) within ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	20.0	33.3	33.3
2 somewhat priority	2	40.0	66.7	100.0
Total	3	60.0	100.0	
Missing System	2	40.0		
Total	5	100.0		

**Q12G Specify**

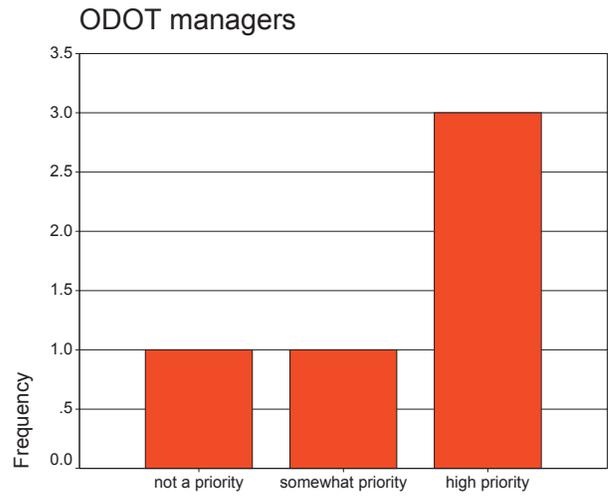
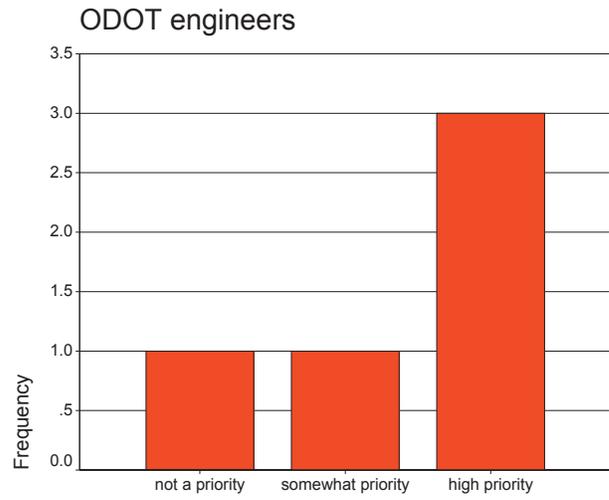
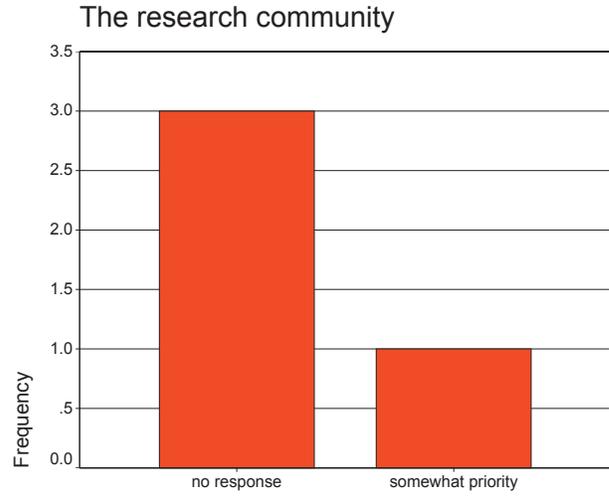
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

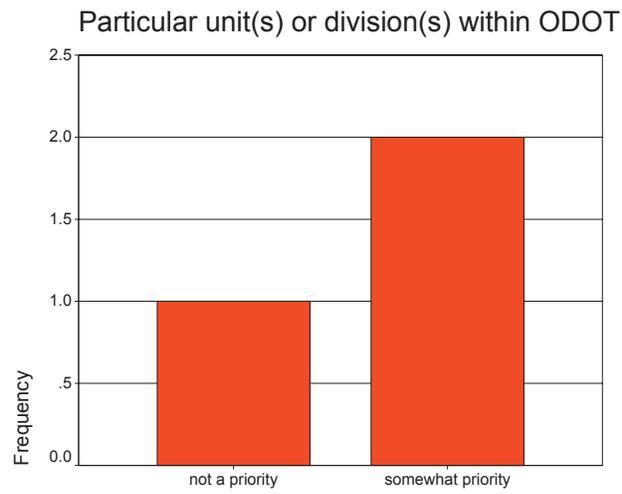
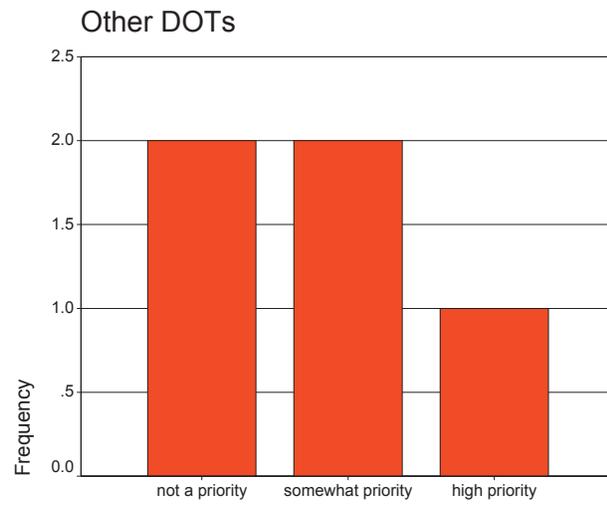
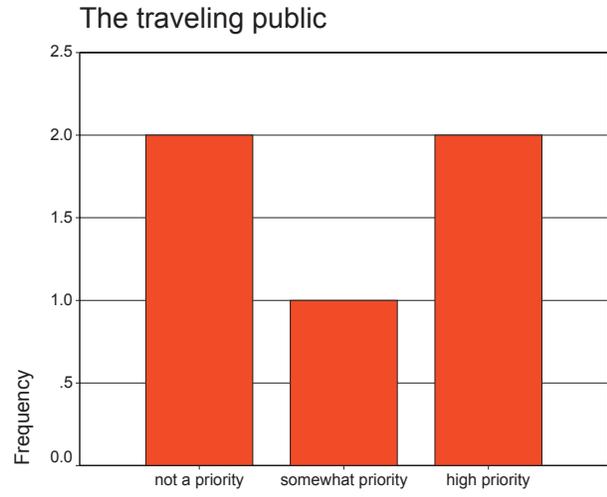
**Q12H Others**

	Frequency	Percent
Missing System	5	100.0

**Q12I Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

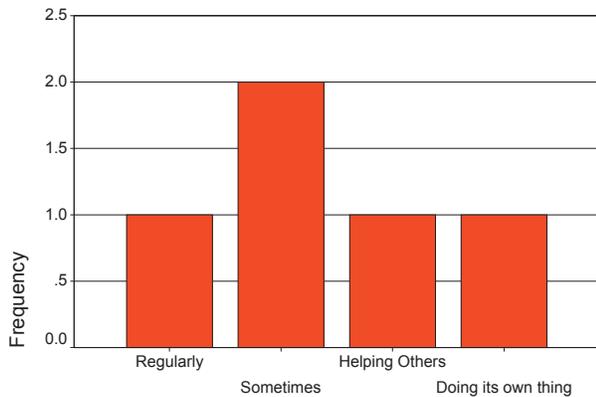




**Q13: Which of the following statements best describes the extent to which your expectations are being met?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Research regularly meets my/my department's expectations	1	20.0	20.0	20.0
	2 Research sometimes meets my/my department's expectations	2	40.0	40.0	60.0
	3 The Research Program is helping other constituents but not mine	1	20.0	20.0	80.0
	4 Research is off on its own, doing its own thing and is not mine	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

Which of the following statements best describes the extent of your expectations



**Q14: How do you learn of research program projects or activities? (please note all that apply)**

**Q14A Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q14B Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q14C IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q14D Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q14E Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14F Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14G Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q14H Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q14I Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14J Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14K Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q14L Colleague**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14M Specify type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q14N Researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q14O Specify type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q14P Other**

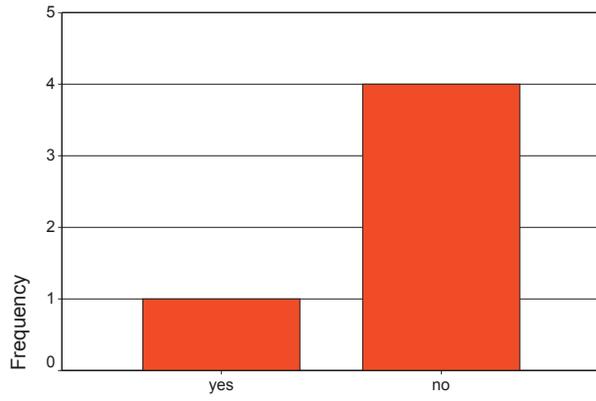
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
2 no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q14Q Specify**

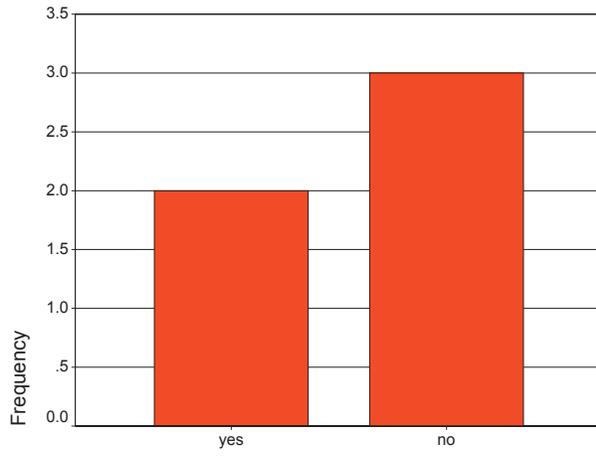
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
I am involved with the management of the program	1	20.0	20.0	60.0
Word of mouth	2	40.0	40.0	100.0
Total	5	100.0	100.0	

Learn of research program?

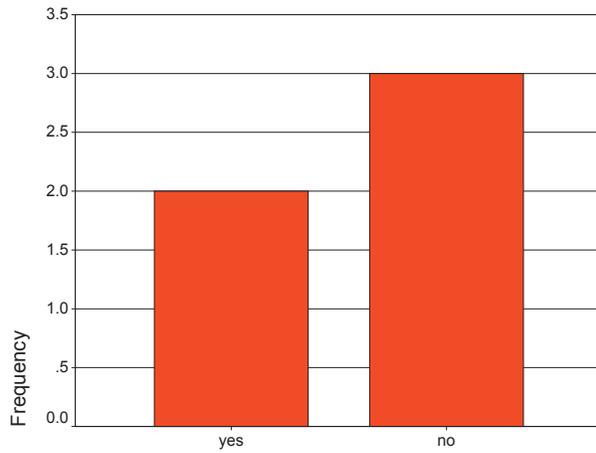
Transcript newsletter

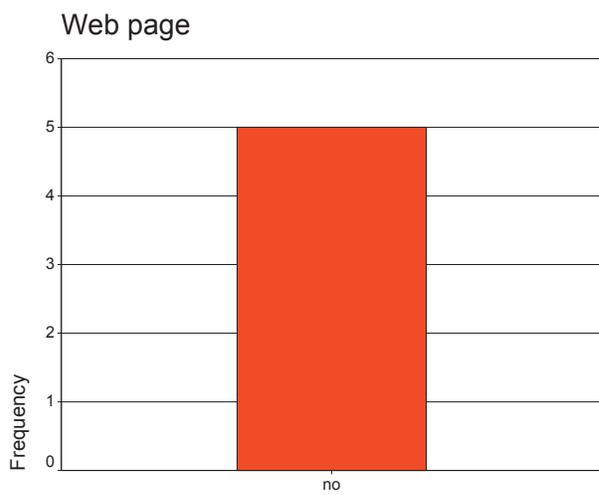
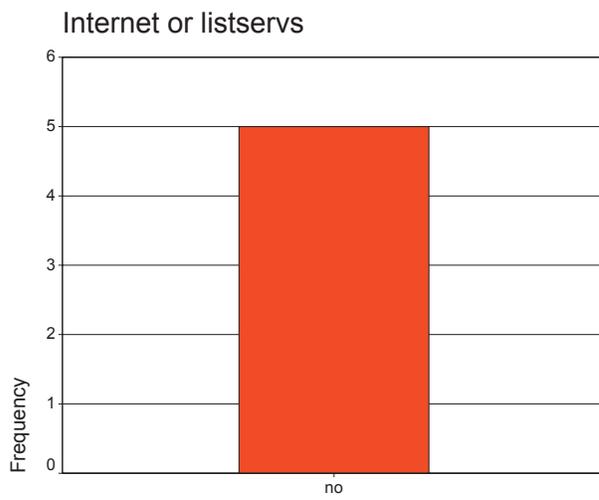
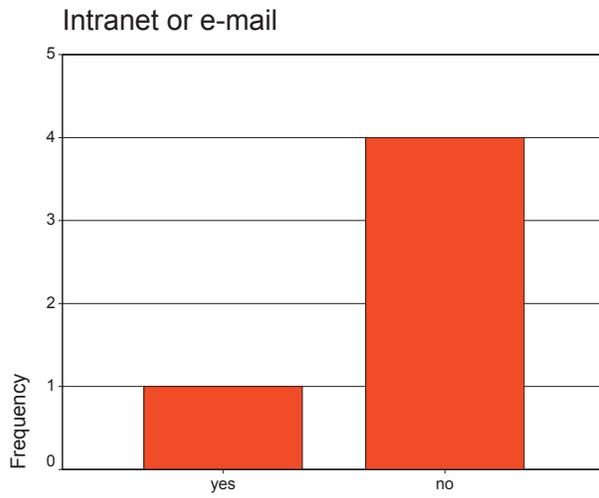


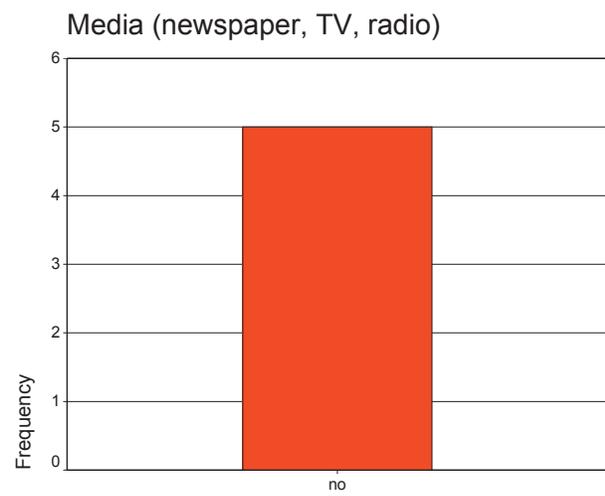
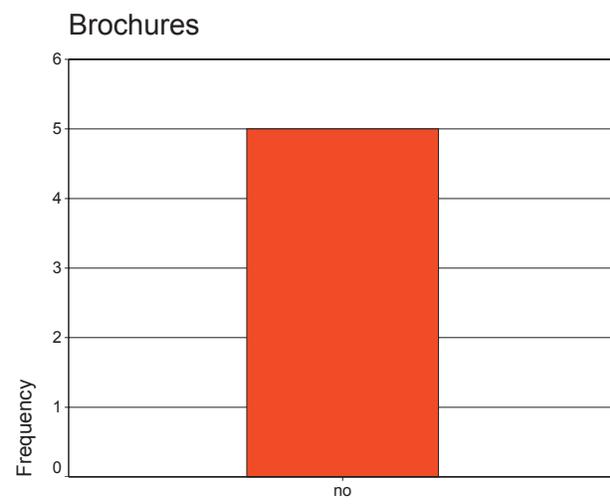
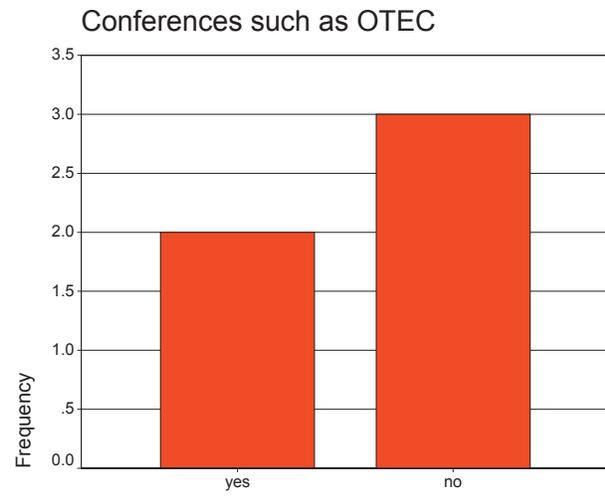
Moving Forward research newsletter

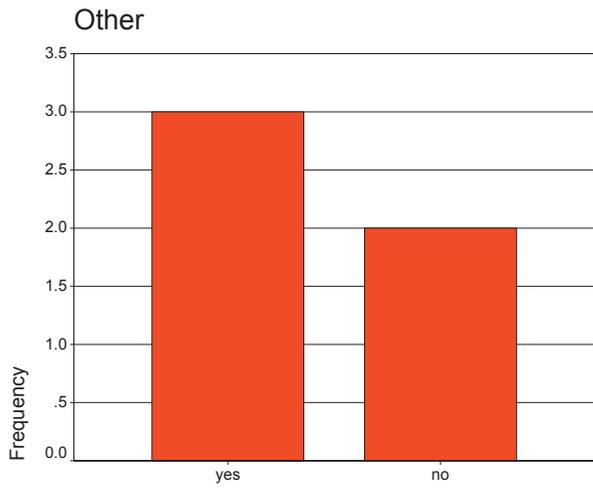
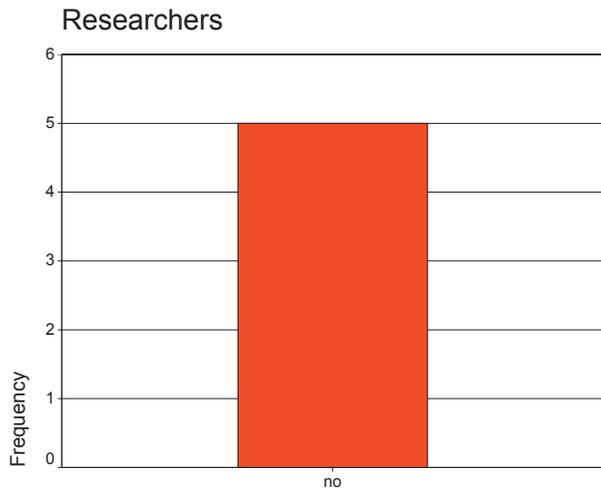
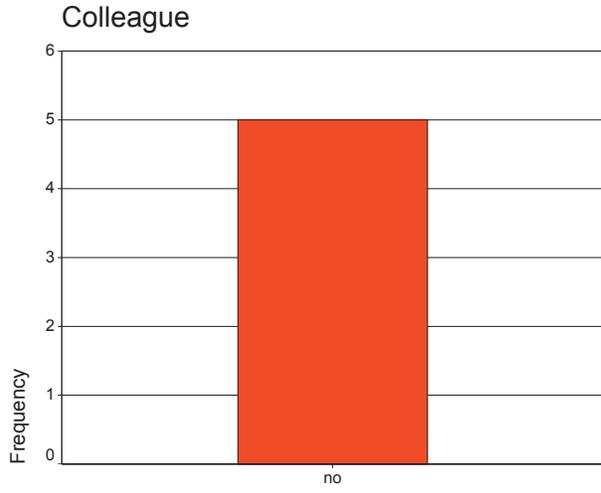


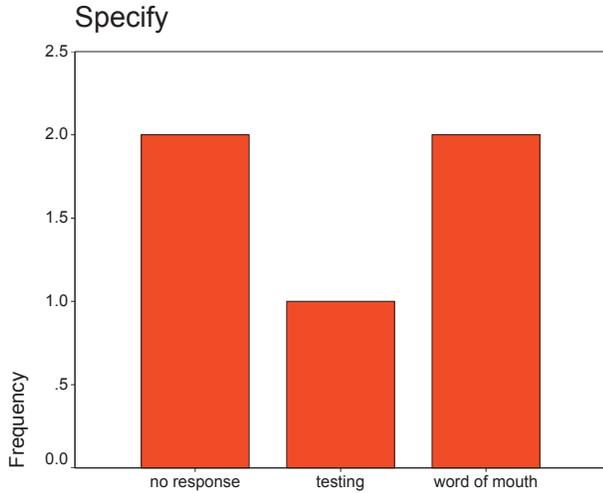
IOCs / Letters







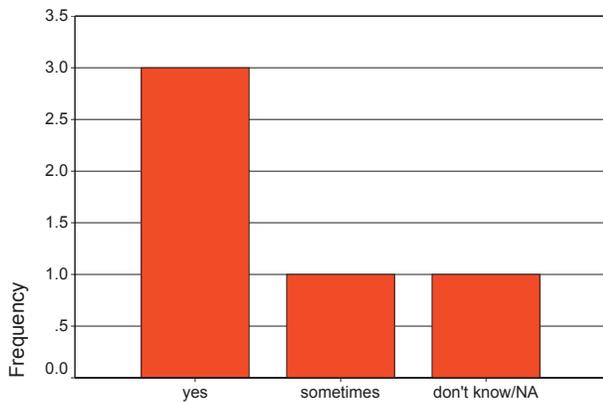




**Q15: Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
3 sometimes	1	20.0	20.0	80.0
4 don't know/not applicable	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Do you find the Research Office to be accessible?



**Q16: Are you aware of any research program activities that resulted in the following:**

**Q16A Personnel cost saving**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q16A1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16B Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q16B1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16C Safety improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q16C1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16D Quality Improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q16D1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16E Better Materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q16E1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16F Better Methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q16F1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q16G Other**

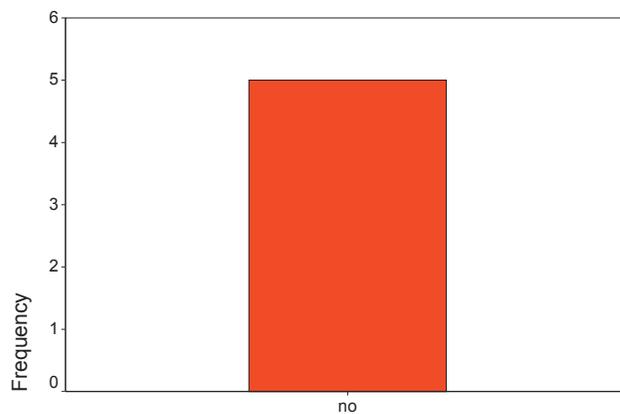
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q16G1 Specify**

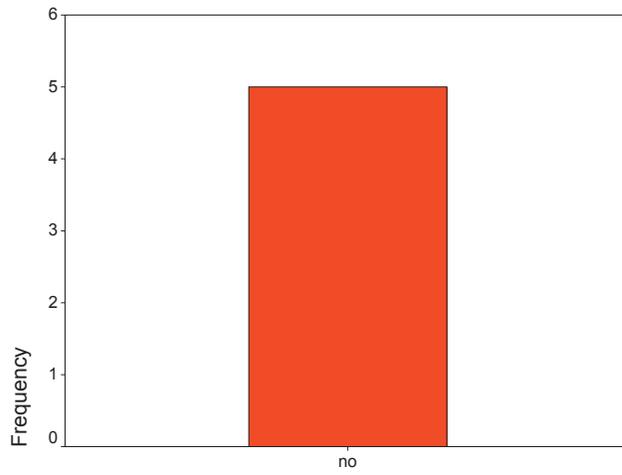
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
Savings to the motoring public with the bridge design project to expedite construction.	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Aware of program

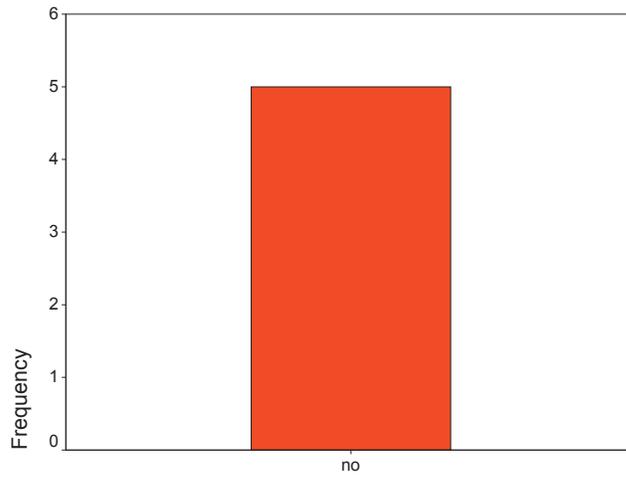
Personnel cost saving



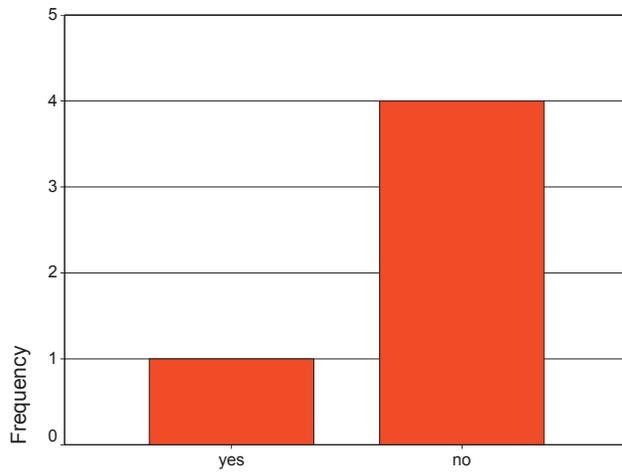
Other cost savings

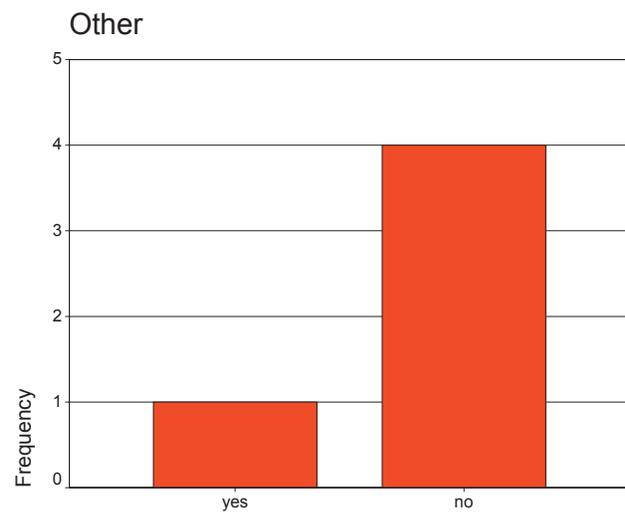
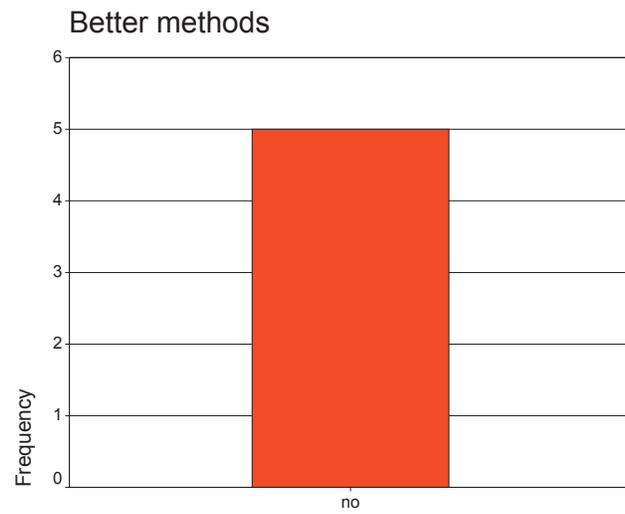
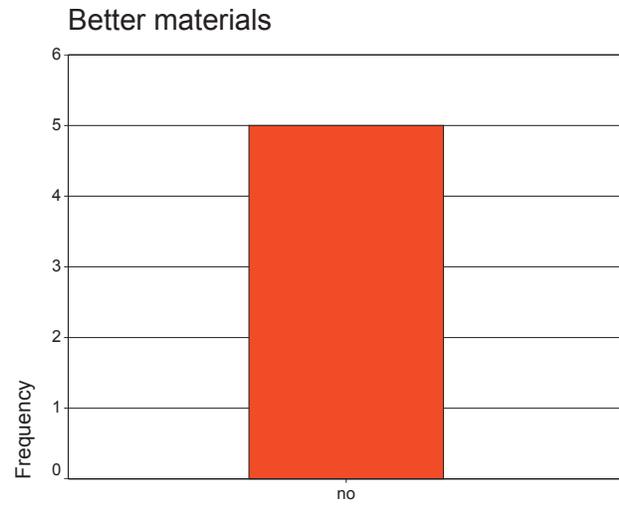


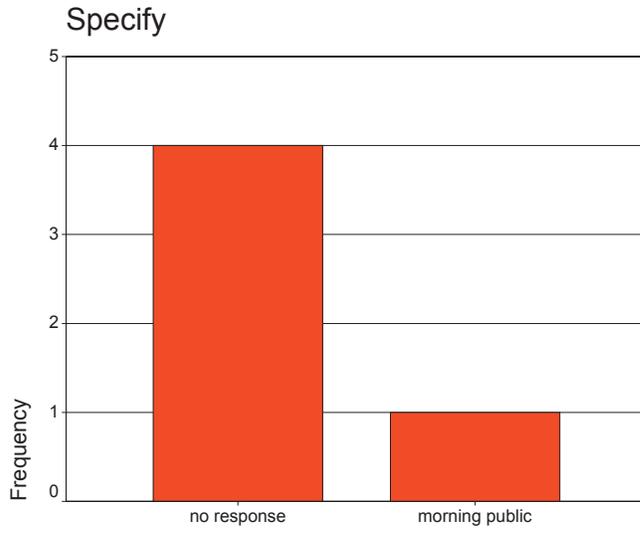
Safety improvement



Quality improvement







**Q17: Have you heard of any of the following specific research projects? If yes, please place a check next to those project titles.**

**Q17A SHRP pavement project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	80.0	80.0	80.0
2 no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q17B Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	75.0	75.0
2 no	1	20.0	25.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q17C Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
2 no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q17D Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	75.0	75.0
2 no	1	20.0	25.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q17E Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q17F Innovative Bridge Design Construction Techniques to Expedite Construction**

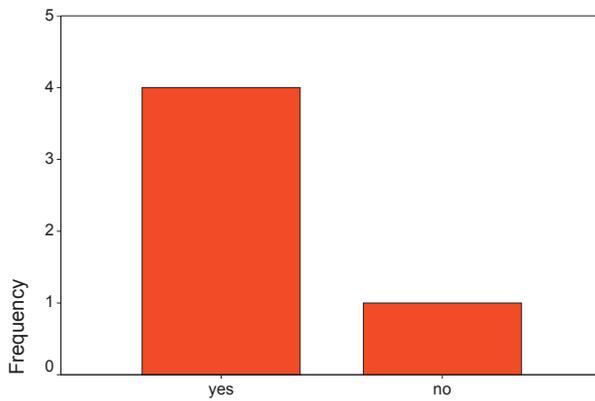
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	60.0	75.0	75.0
	2 no	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q17G Comparison and Definition of State DOT? Practices in Selection of**

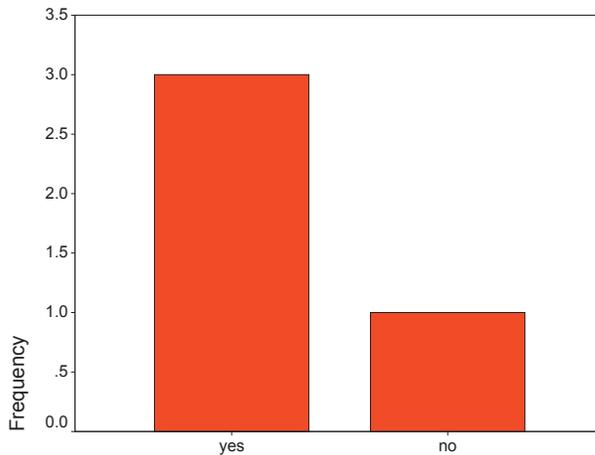
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	60.0	60.0	60.0
	2 no	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

Heard of project

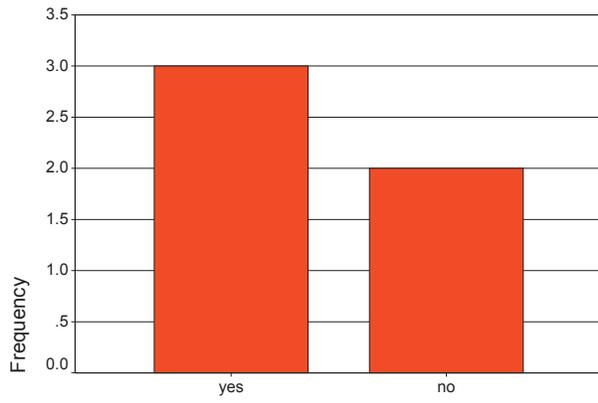
SHRP pavement project on Delaware 23



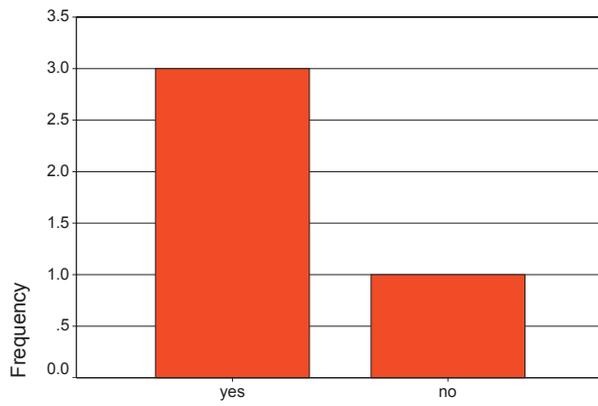
Ohio Freight Study



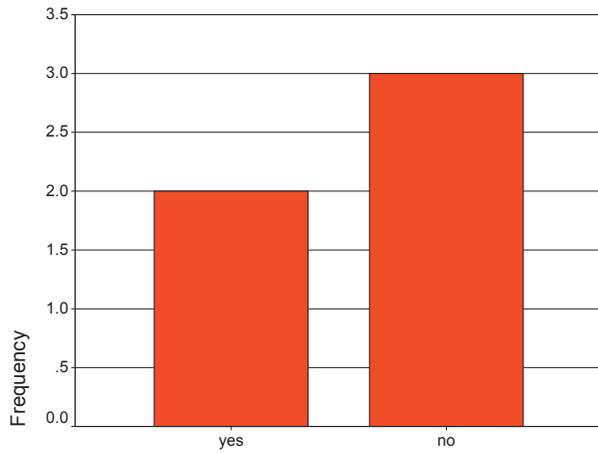
Evaluation of Warranty Provisions  
on ODOT Construction Projects



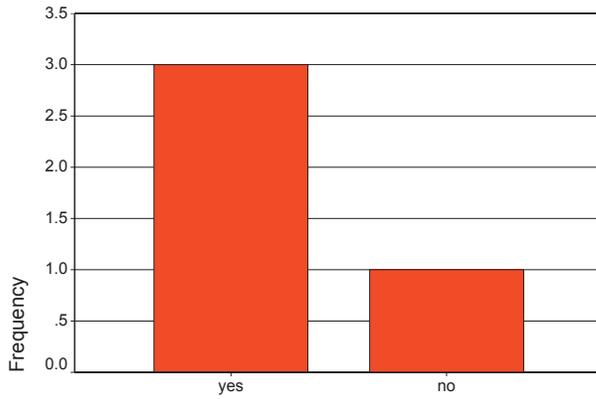
Evaluation of Drainable Bases Under  
Asphalt Pavement



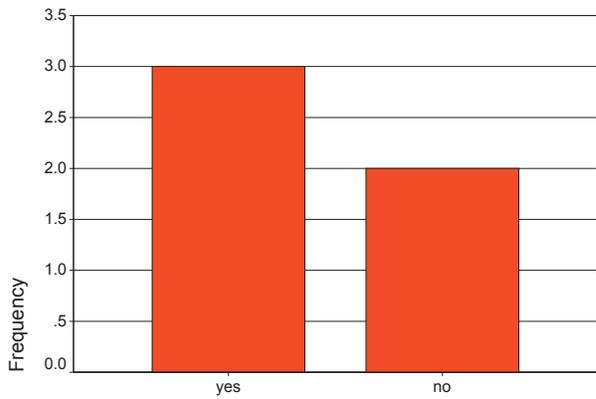
Development of Crash Reduction



Innovative Bridge Design Construction  
Techniques to Expedite Construction



Comparison and Definition of State DOT's  
Practices in Selection of Materials



**Q17A: How did you hear of them?**

**Q17A1 Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A2 Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A3 Memoranda / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A4 Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A5 Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A6 Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A7 Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
2 no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q17A8 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
OTEK	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q17A9 Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q17A10 Media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q17A11 Colleagues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q17A12 Other**

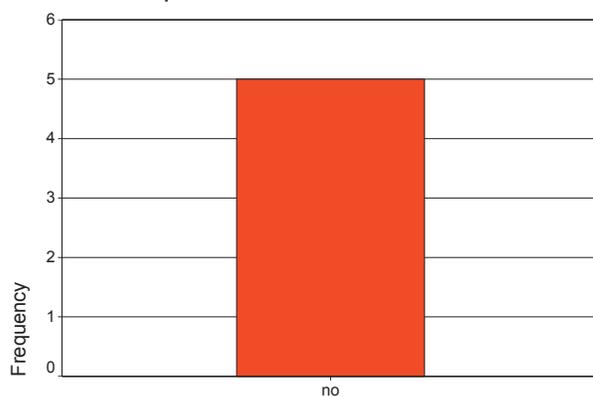
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	50.0	50.0
	2 no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

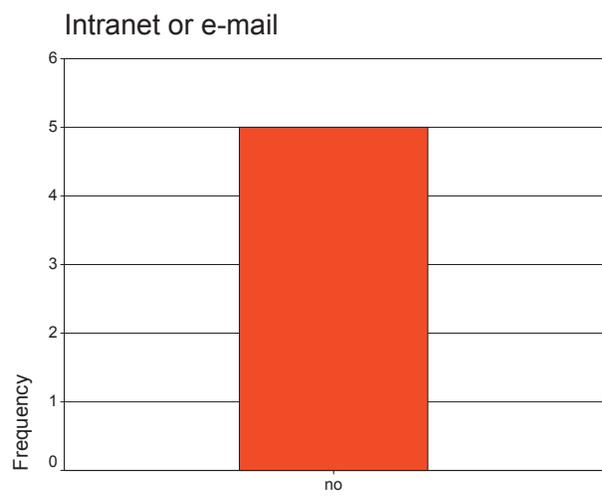
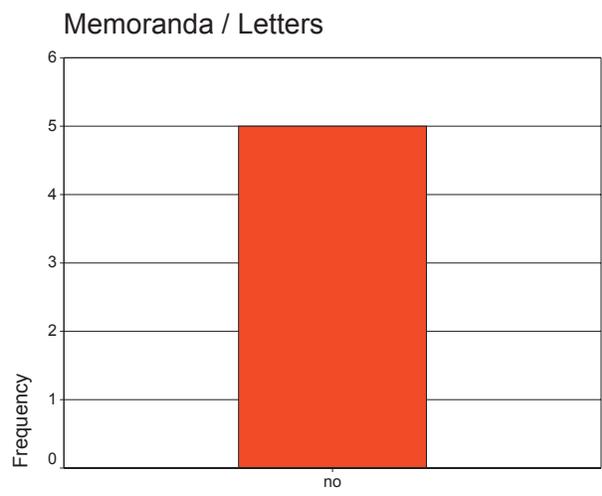
**Q17A13 Specify**

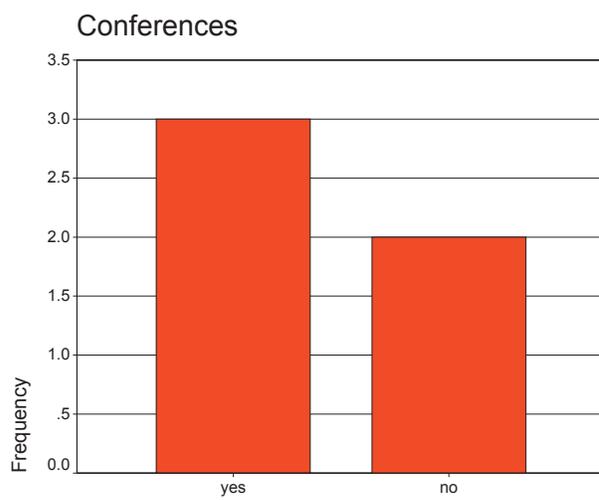
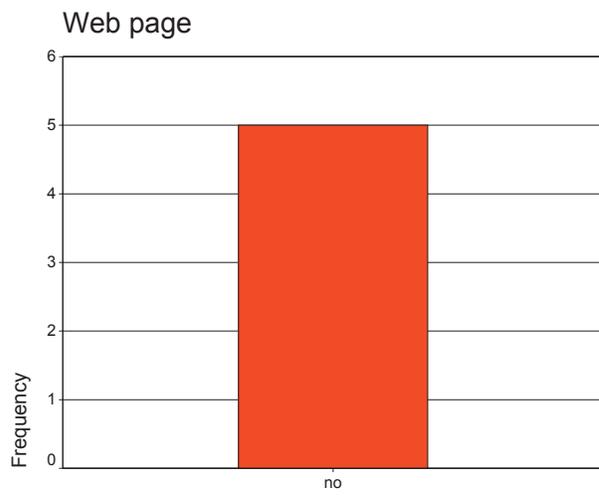
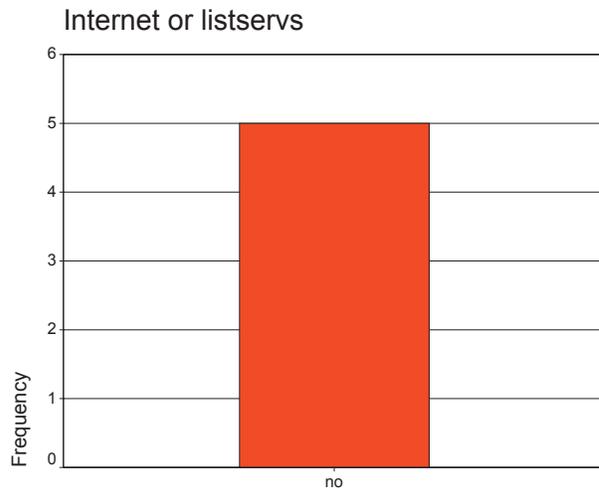
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	60.0	60.0	60.0
	I am involved with the management of the program	1	20.0	20.0	80.0
	Word of mouth	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

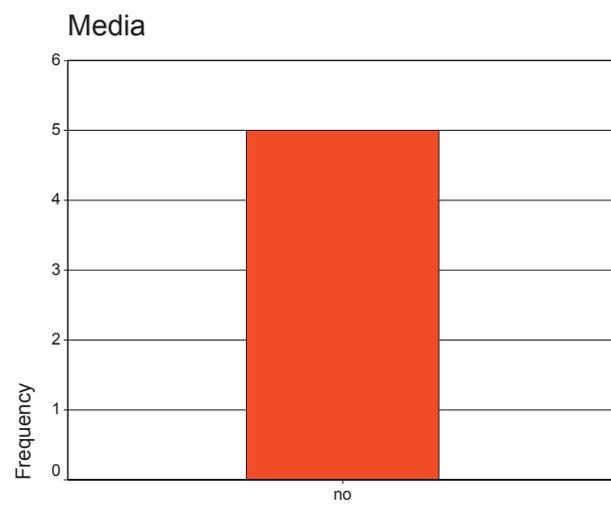
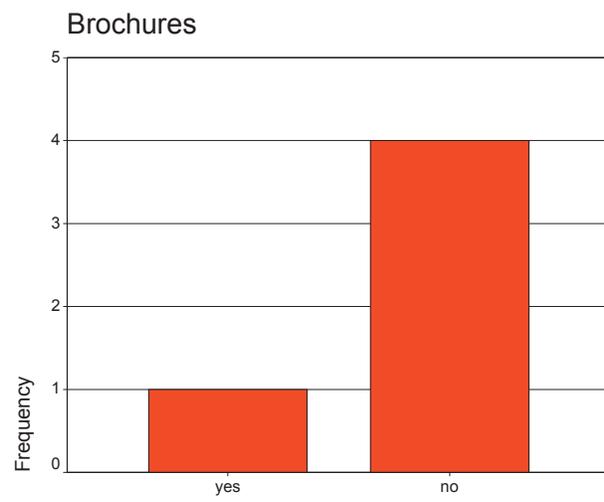
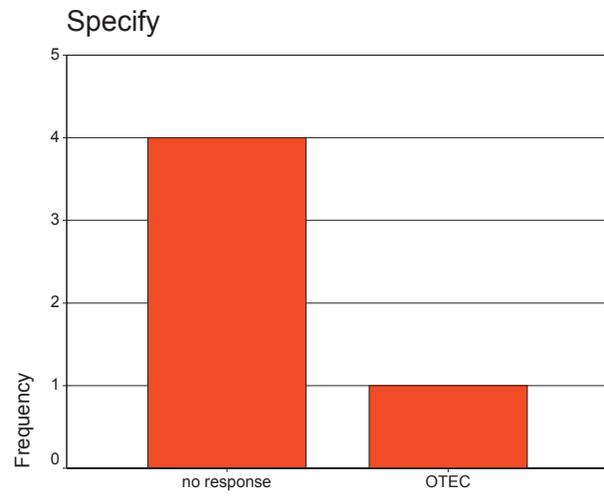
How heard of them?

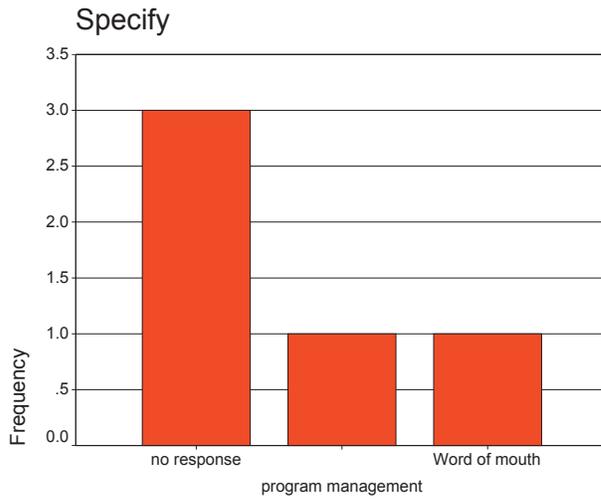
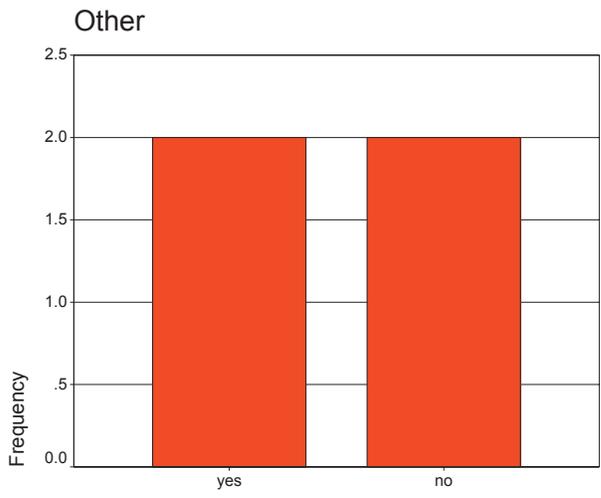
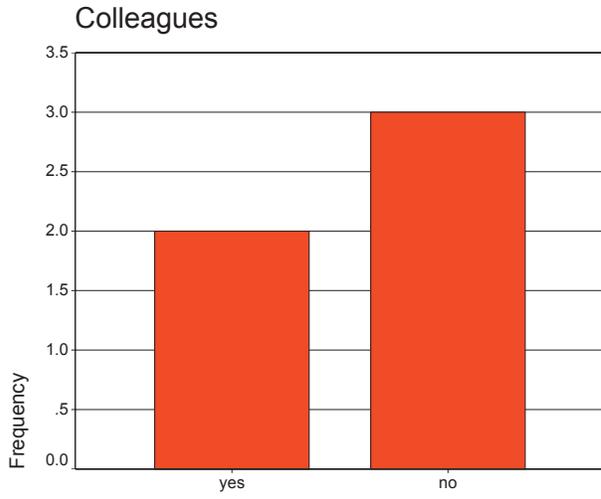
Transcript newsletter











**Q18: What kinds of limitation, if any, do you believe the Research Office faces? (please note all that apply)**

**Q18A Inadequate staffing**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q18B Inadequate funding**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q18C Inadequate support from sponsors**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q18D Risk of no payoff**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q18E Political considerations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	5	100.0	100.0	100.0

**Q18F No significant limitations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q18G Other**

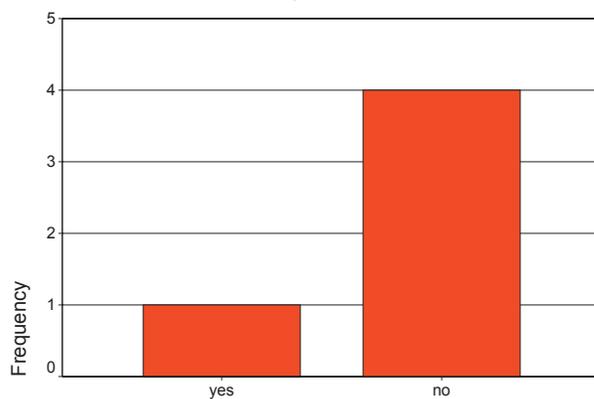
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	5	100.0	100.0	100.0

### Q18H Specify

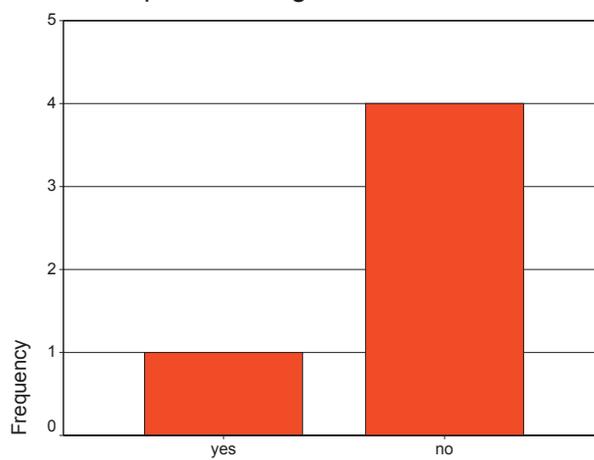
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	80.0	80.0	80.0
	2	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

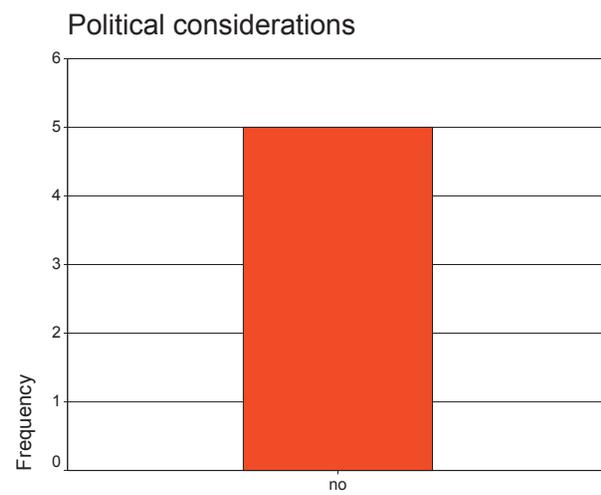
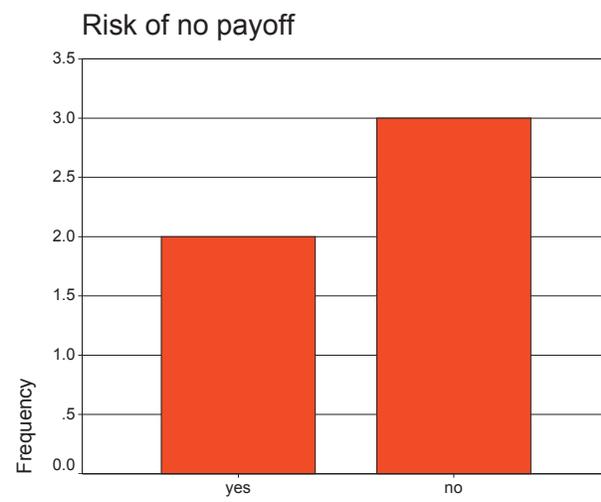
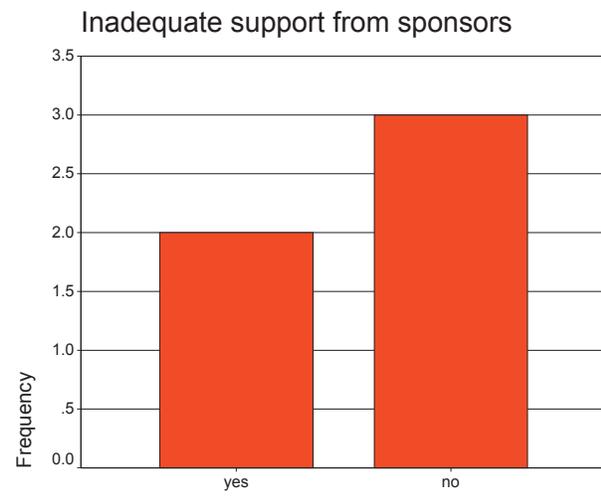
#### Limitations

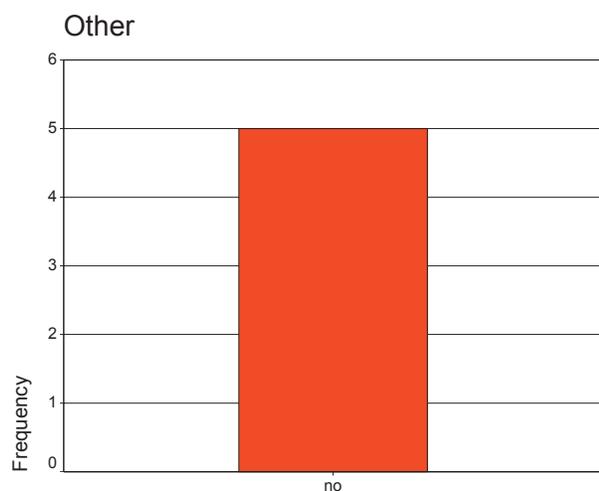
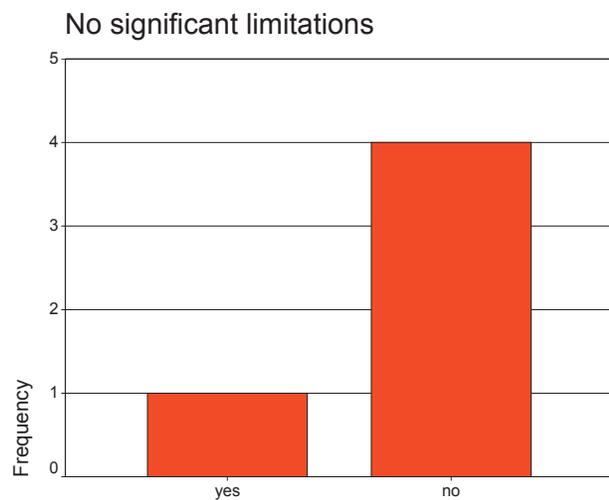
##### Inadequate staffing



##### Inadequate funding







**Q19: What is your preferred source of information about the research program? That is, how could the Research Office best keep in touch with you?**

**Q19A Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q19B Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q19C IOCs / Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q19D Intranet or e-mail**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q19E Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**Q19F Conferences such as OTEC**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q19G Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	100.0	100.0	100.0

**Q19H Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q19I Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	20.0	20.0	20.0
	2 no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q19J Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q19K Other**

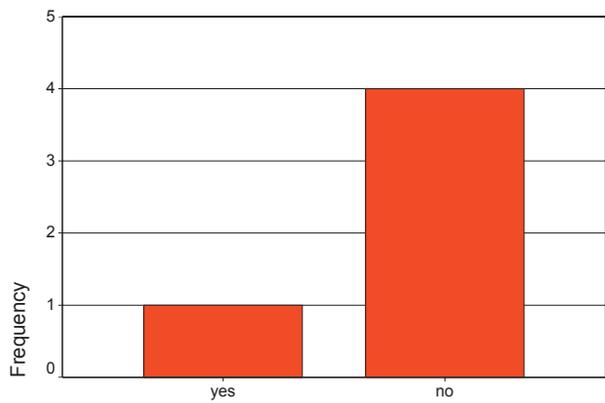
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	5	100.0	100.0	100.0

**Q19L Specify**

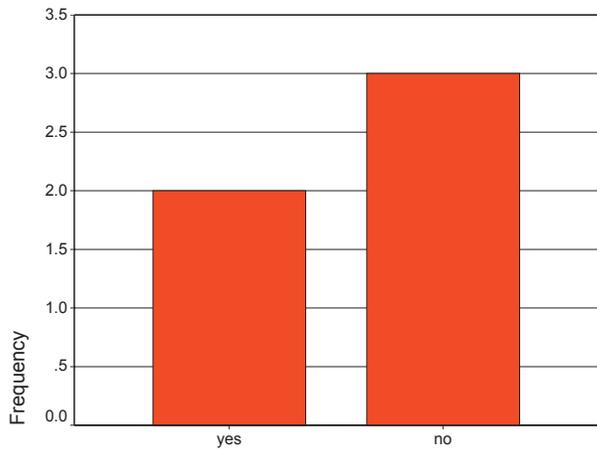
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

Preferred source

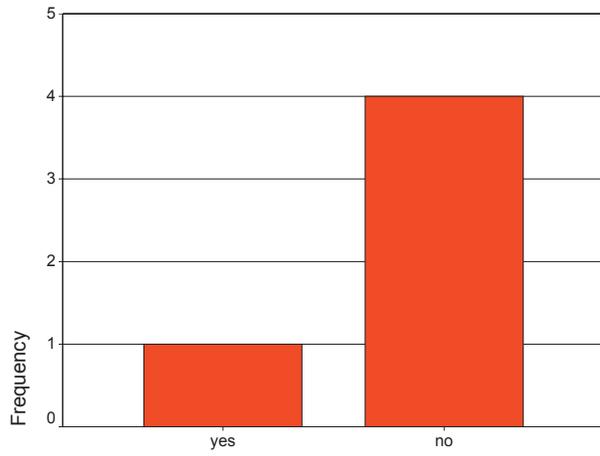
Transcript newsletter



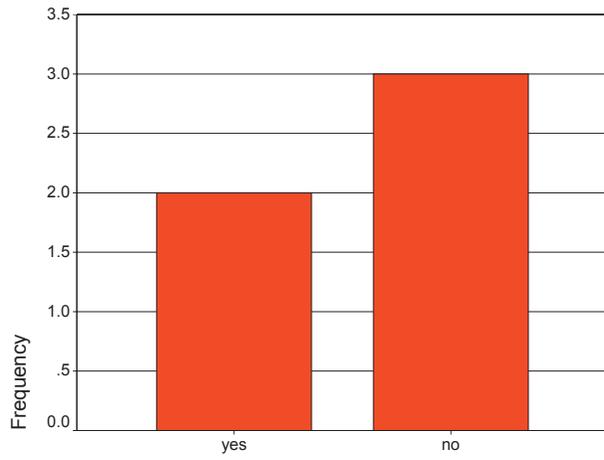
Moving Forward research newsletter



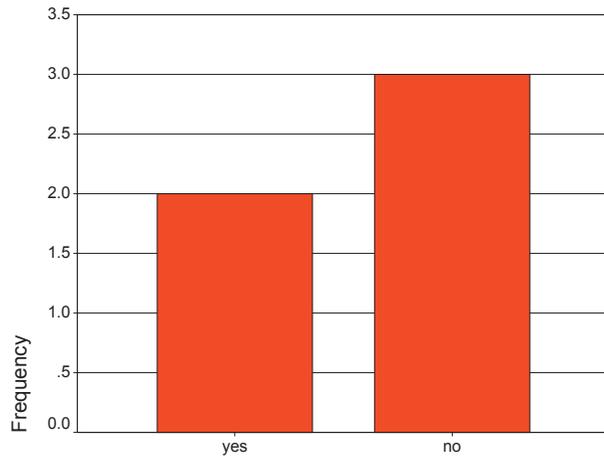
IOCs / Letters

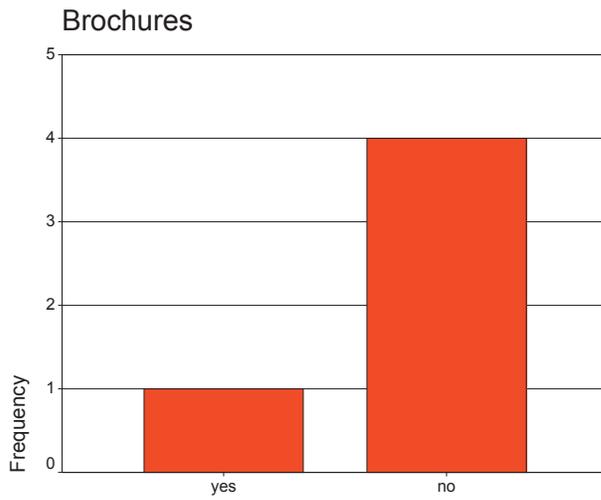
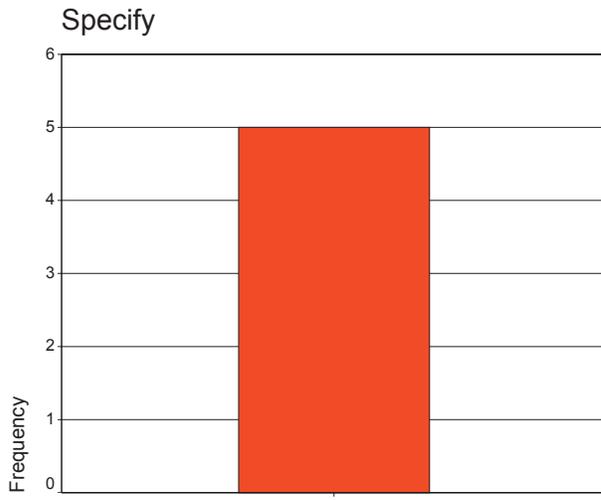
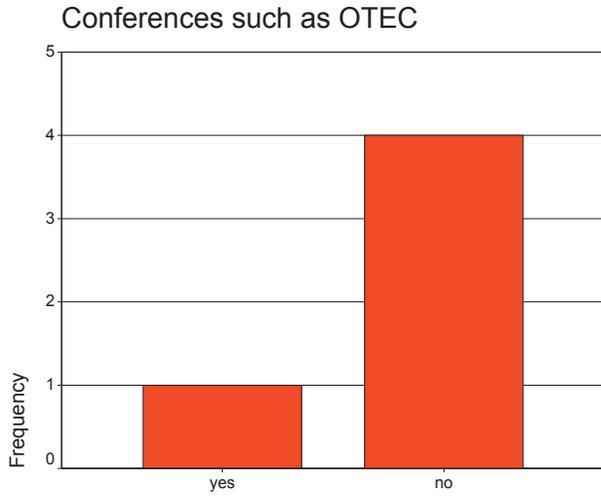


Intranet or e-mail

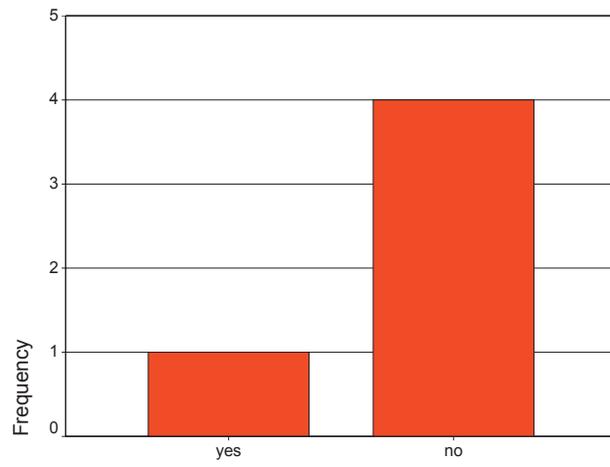


Web page

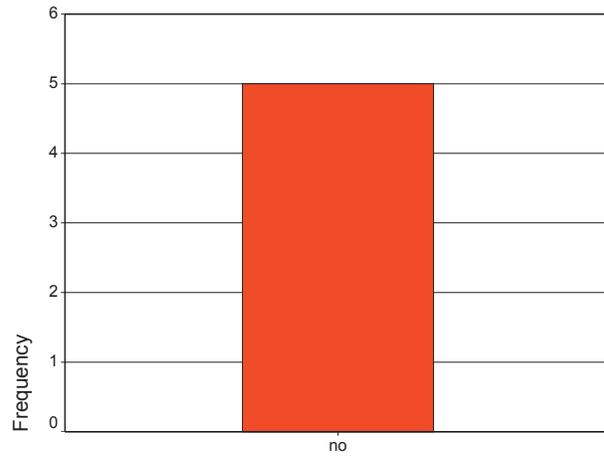




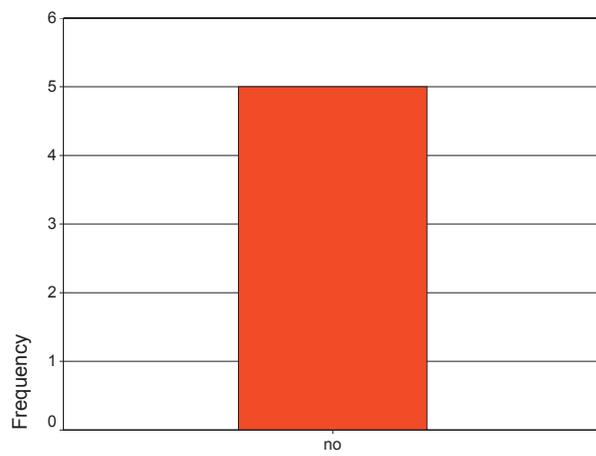
Media (newspaper, TV, radio)



Colleagues

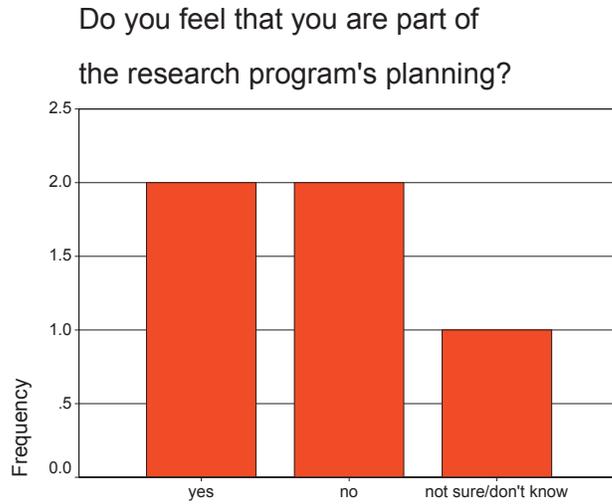


Other



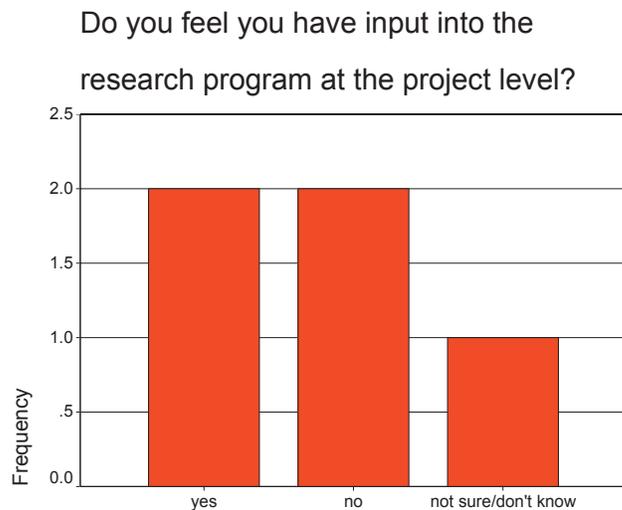
**Q20: Do you feel that you are part of the research program's strategic planning process?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	2	40.0	40.0	80.0
	3 not sure/don't know	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**Q21 Do you feel that you have input into the research program at the project level?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	40.0	40.0	40.0
	2 no	2	40.0	40.0	80.0
	3 not sure/don't know	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**Q22: What types of research activities are you most interested in knowing about? (please check all that apply)**

**Q22A Requests for Proposals**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q22B Ohio success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
2 no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q22C Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	40.0	40.0	40.0
2 no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q22D Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	80.0	80.0	80.0
2 no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q22E Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q22F Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q22G Strategic research plan**

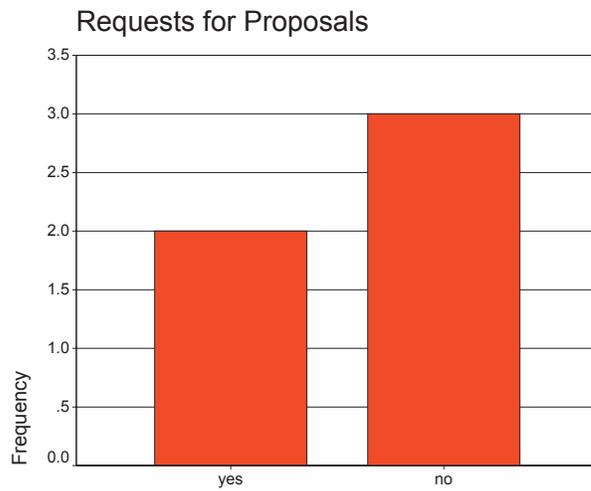
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

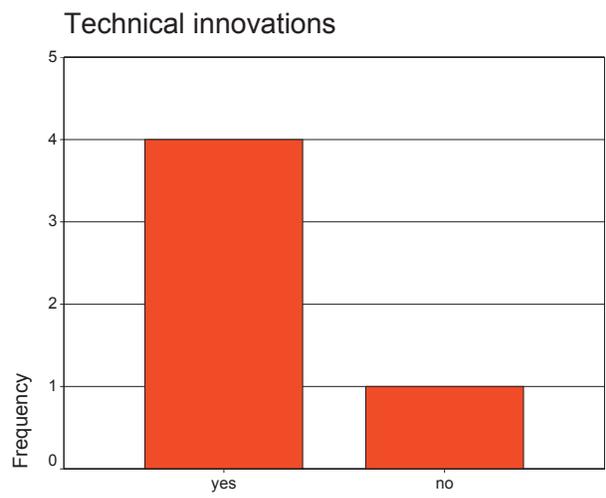
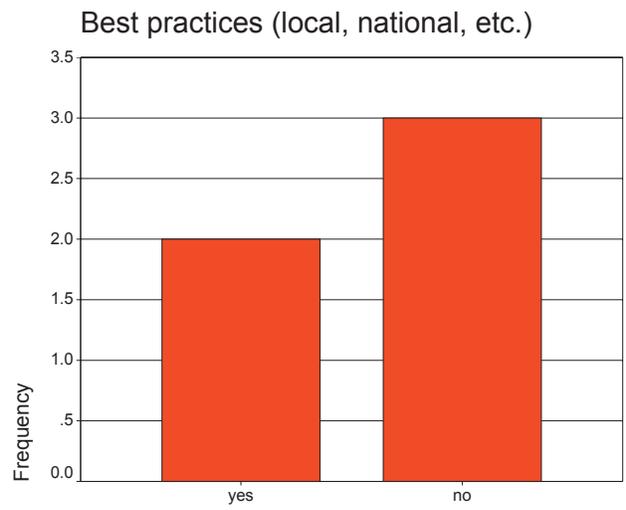
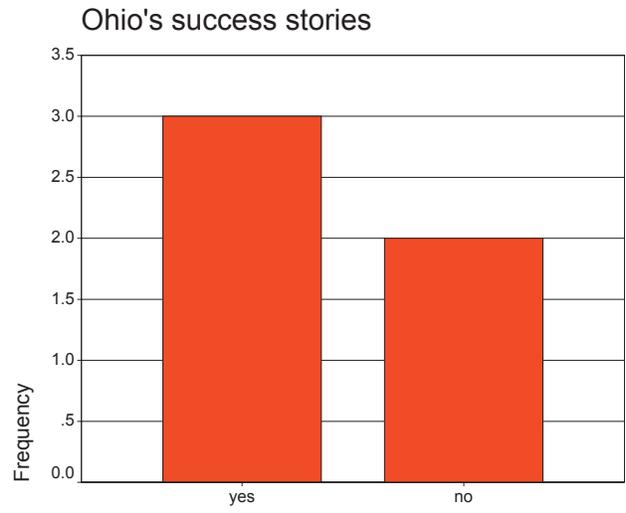
**Q22H Training opportunities**

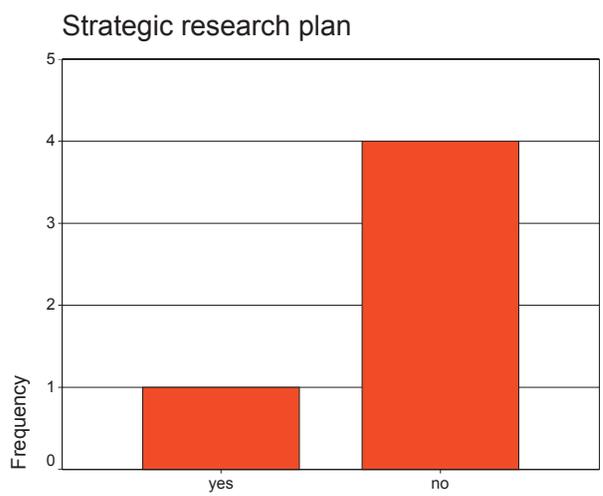
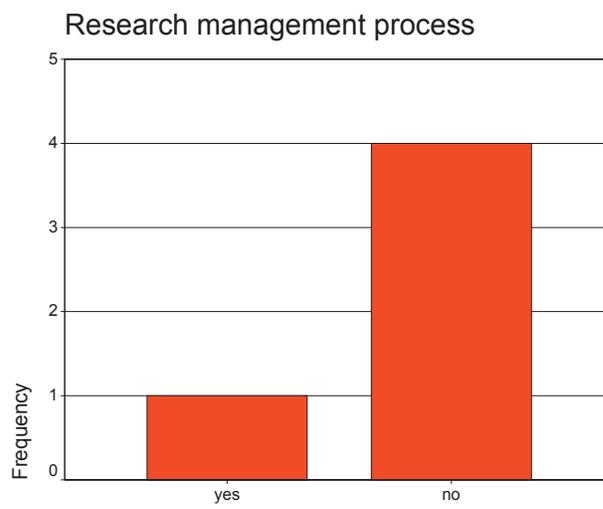
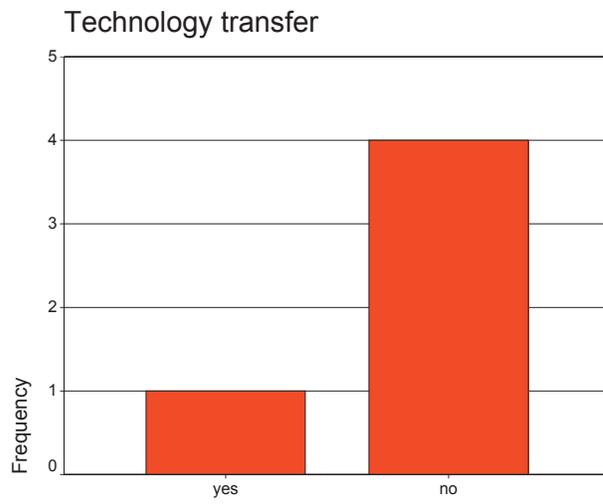
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	20.0	20.0	20.0
2 no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q22I Implementation**

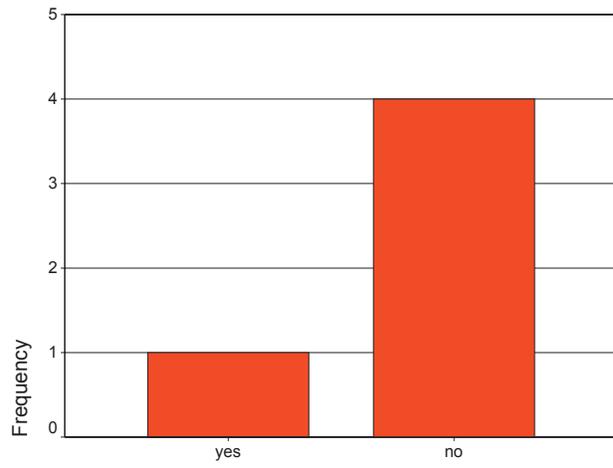
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	60.0	60.0	60.0
2 no	2	40.0	40.0	100.0
Total	5	100.0	100.0	



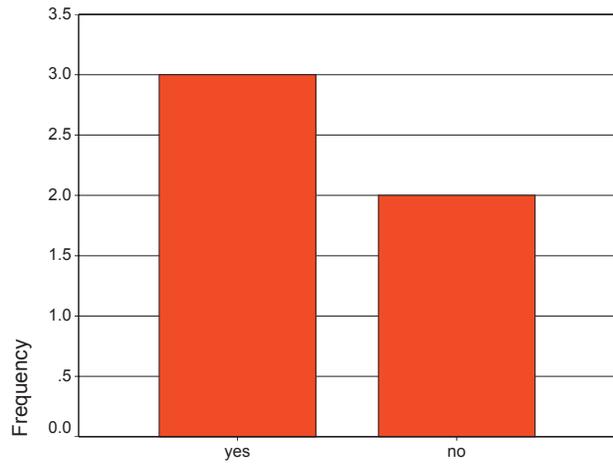




Training opportunities



Implementation



**Q23: Finally, please take a moment to consider---and then list---any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.**

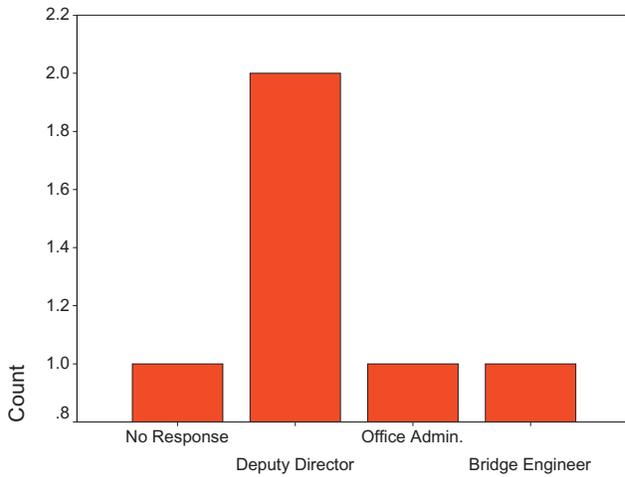
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
All ODOT district administrators, Ohio engineering consultants	1	20.0	20.0	60.0
Counties, cities, villages and townships.	1	20.0	20.0	80.0
none	1	20.0	20.0	100.0
Total	5	100.0	100.0	

## Appendix B Administrators/Directors (not largely involved) Survey Results

**Q1: What is your working title?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20.0	20.0	20.0
Deputy Director	2	40.0	40.0	60.0
Office Administrator	1	20.0	20.0	80.0
State Bridge Engineer	1	20.0	20.0	100.0
Total	5	100.0	100.0	

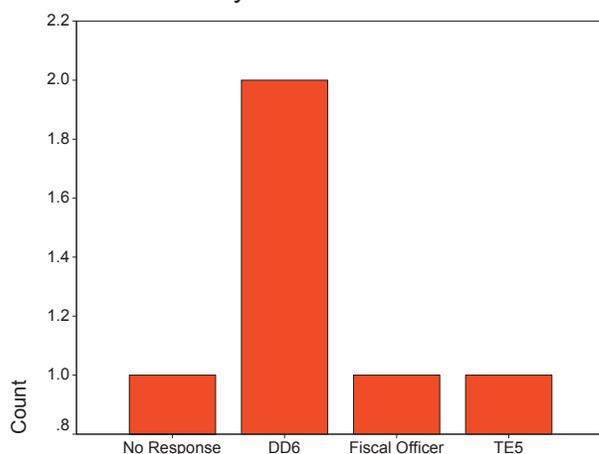
Q1: What is your working title?



**Q2: What is your work classification (e.g., TE 3)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20.0	20.0	20.0
DD6	2	40.0	40.0	60.0
Fiscal Officer	1	20.0	20.0	80.0
TE5	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Q2: What is your work classification



Q3: In what division/office are you employed?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20.0	20.0	20.0
Division of Finance and Forecasting	1	20.0	20.0	40.0
Division of Production Management	1	20.0	20.0	60.0
Finance	1	20.0	20.0	80.0
Office of Structural Engineering	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Q4: How many years have you been employed in your current position?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.50	1	20.0	20.0	20.0
3.00	1	20.0	20.0	40.0
8.00	1	20.0	20.0	60.0
12.00	1	20.0	20.0	80.0
16.00	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Q5: To what degree would you say you are involved in the research program?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very involved	1	20.0	20.0	20.0
somewhat involved	1	20.0	20.0	40.0
not very involved	2	40.0	40.0	80.0
not at all involved	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q5a1: Project Monitor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5a2: Supplied research needs/project ideas**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	40.0	50.0	50.0
	no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5a3: Implementation of a product of the research program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	40.0	50.0	50.0
	no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5a4: Reviewed research proposals being considered for funding**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	40.0	50.0	50.0
	no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5a5: Reviewed final reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q5a6: Other**

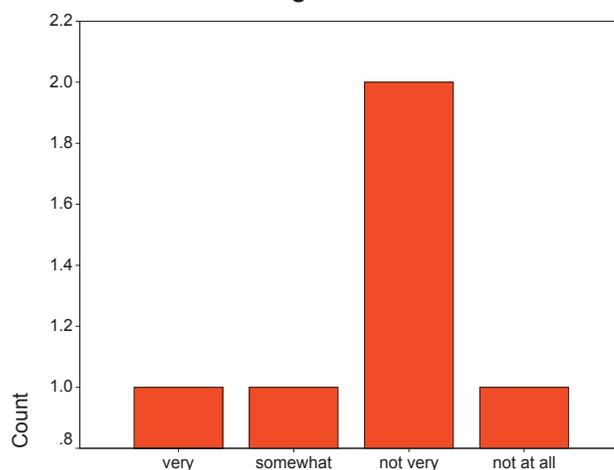
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
yes	1	20.0	25.0	25.0
no	3	60.0	75.0	100.0
Total	4	80.0	100.0	
Missing				
System	1	20.0		
Total	5	100.0		

**Q5a7: Specify**

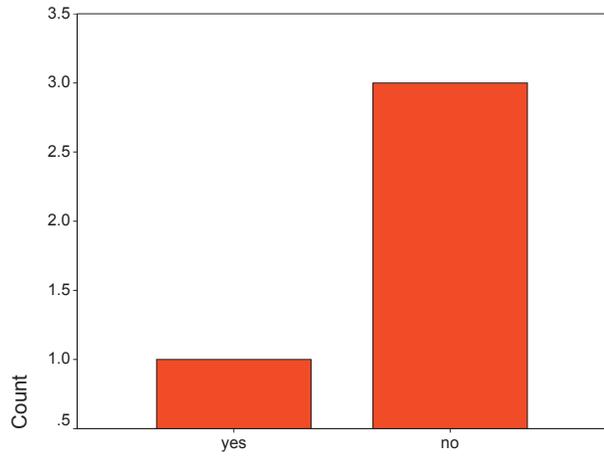
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
selection of R&D projects	4	80.0	80.0	80.0
Total	5	100.0	100.0	100.0

**Q5b: What is the main reason for your lack of involvement?**

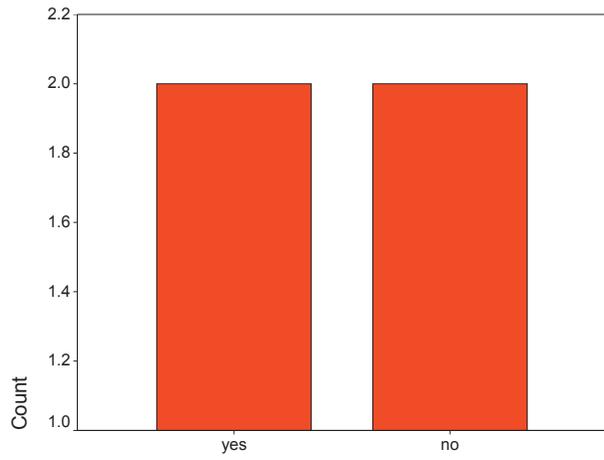
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
attorney, not involved	1	20.0	20.0	60.0
deal with research on fiscal basis	1	20.0	20.0	80.0
no need	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q5: To What Degree Are You Involved**

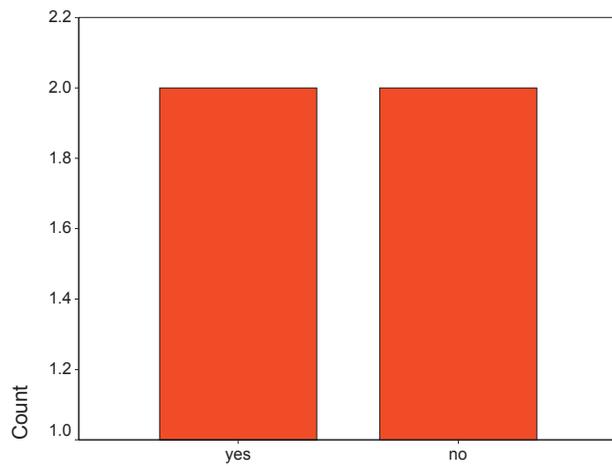
Q5a1: Project Manager



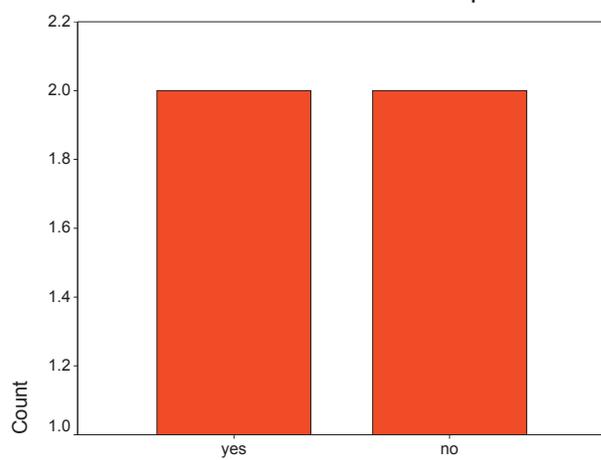
Q5a2: Supplied Research Needs/Ideas



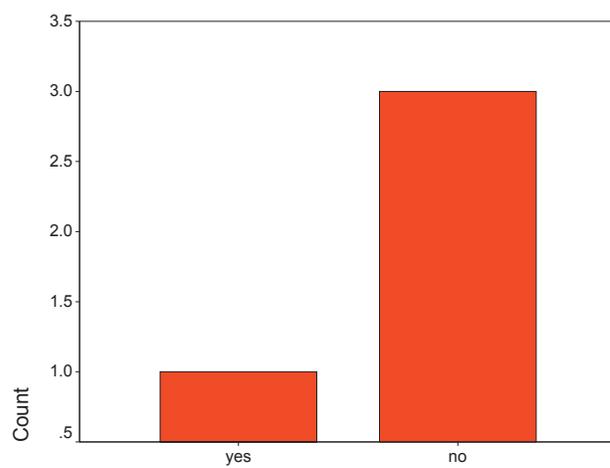
Q5a3: Implementation Of A Product



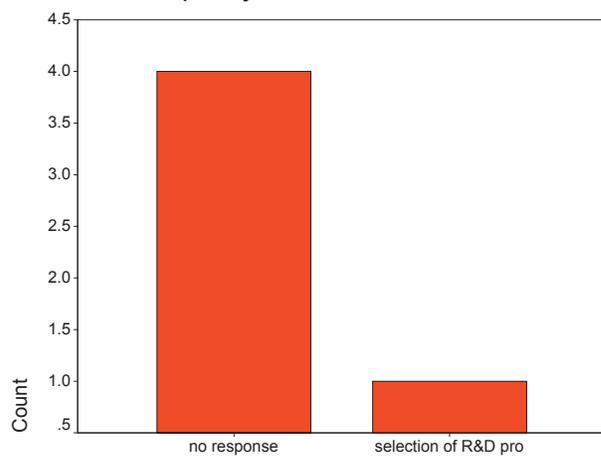
Q5a4: Reviewed Research Proposals



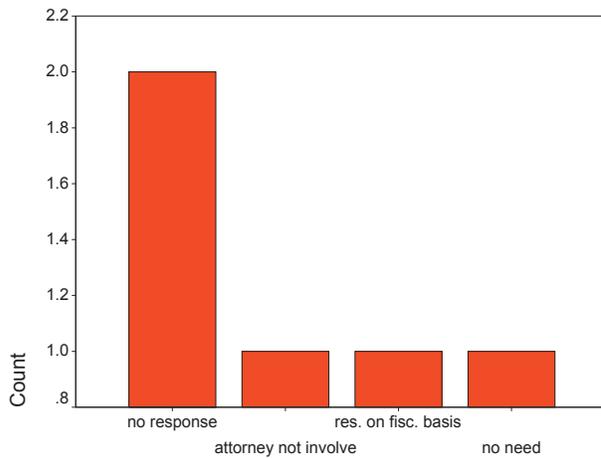
Q5a6: Other



Q5a7: Specify



Q5b: What Is The Main Reason



**Q6: Rate the Activities You Expect from the Research Office**

**Q6a: To solve problems for constituents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
not a priority	1	20.0	20.0	20.0
somewhat priority	1	20.0	20.0	40.0
high priority	2	40.0	40.0	60.0
Total	5	100.0	100.0	100.0

**Q6b: To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
not a priority	2	40.0	40.0	40.0
Total	5	100.0	100.0	100.0

**Q6c: To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
not a priority	2	40.0	40.0	40.0
somewhat priority	1	20.0	20.0	60.0
high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	100.0

**Q6d: To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
somewhat priority	2	40.0	40.0	40.0
high priority	3	60.0	60.0	100.0
Total	5	100.0	100.0	100.0

**Q6e: To compile best practices from peers and other organizations and share**

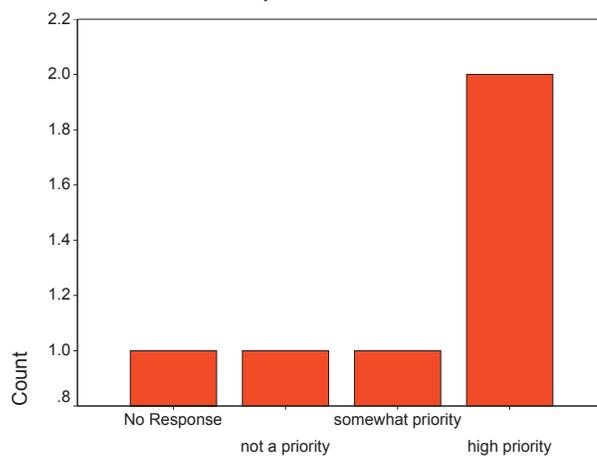
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	20.0	20.0	20.0
somewhat priority	2	40.0	40.0	60.0
high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q6f: Other**

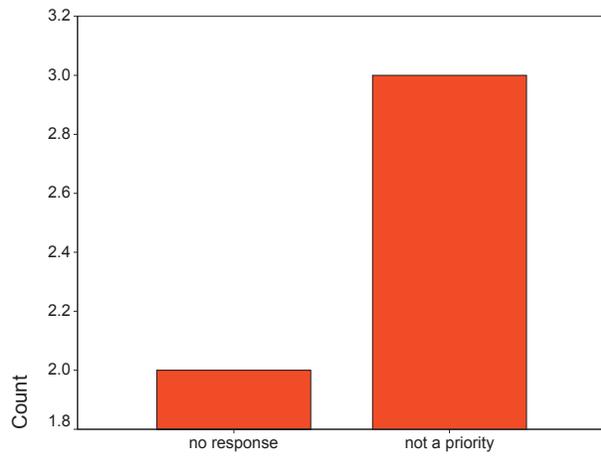
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	75.0	75.0
high priority	1	20.0	25.0	100.0
Total	4	80.0	100.0	
Missing System	1	20.0		
Total	5	100.0		

**Q6g: Specify**

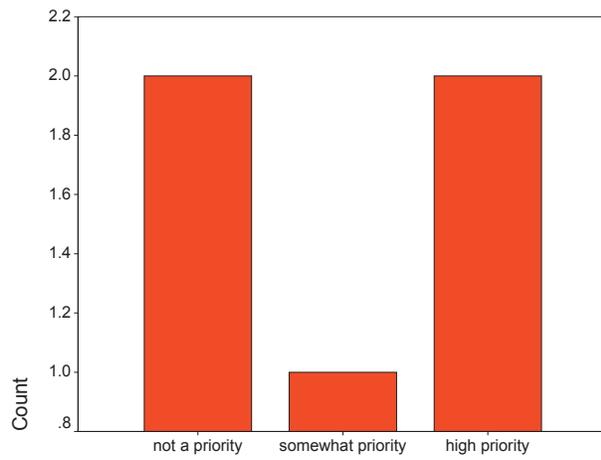
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
technology	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q6a: To solve problems for constituents**

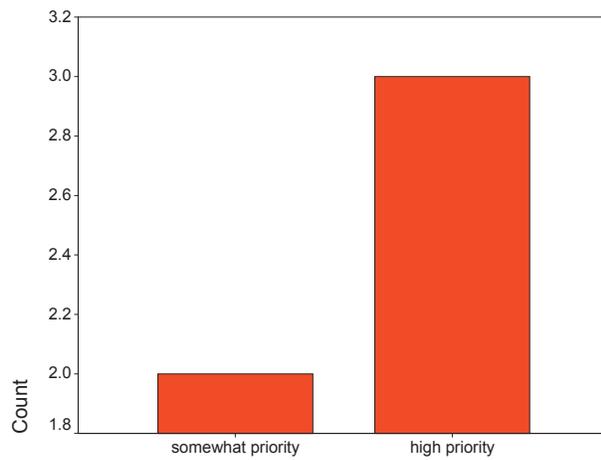
Q6b: To attain national recognition for Ohio

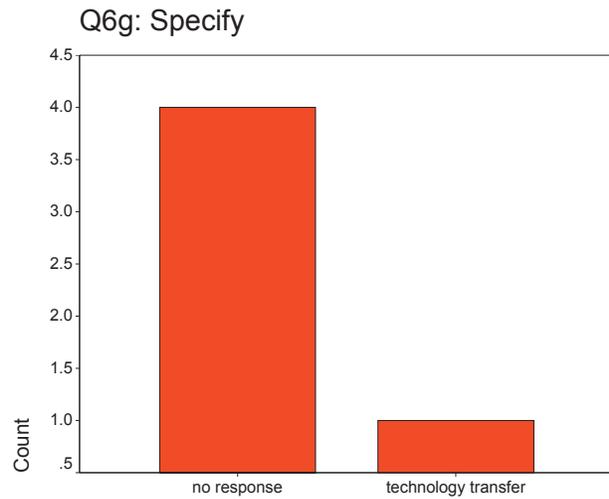
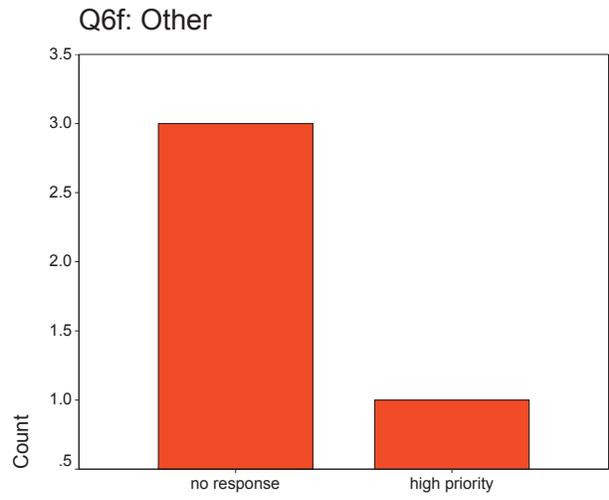
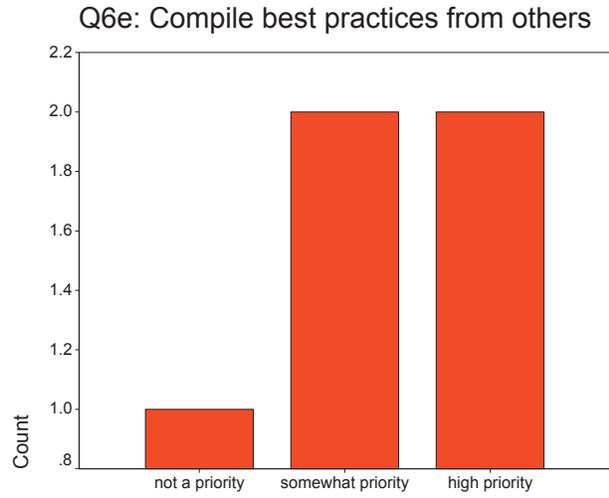


Q6c: To serve as a technical resource



Q6d: To seek out or propose ways

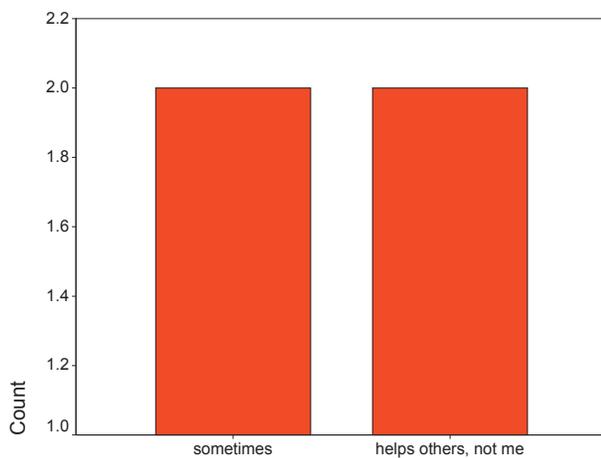




**Q7: Which of the following statements best describes the extent to which your expectations are being met?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Research sometimes meets my/my department's expectations	2	40.0	50.0	50.0
	The Research Program is helping other constituents but not m	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

Q7: Best describes the extent



**Q8: How do you learn of research program projects or activities? (note all that apply)**

**Q8a: Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	60.0	60.0	60.0
	no	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**Q8b: Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	20.0	20.0
	no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Q8c: IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q8d: Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q8e: Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q8f: Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q8g: Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q8h: specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q8i: Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q8j: Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q8k: specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q8l: Colleague**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q8m: specify type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q8n: Researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q8o: Specify type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

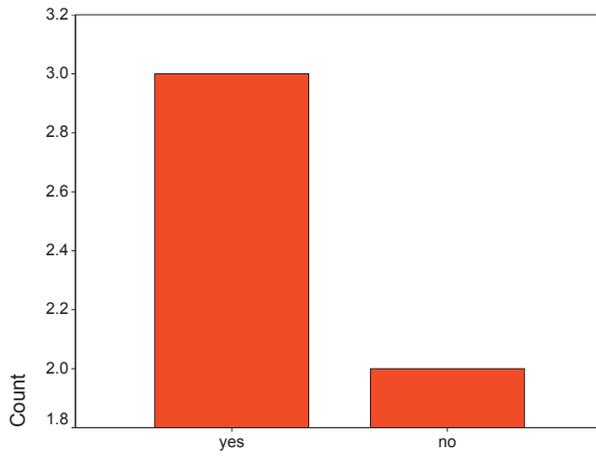
**Q8p: Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

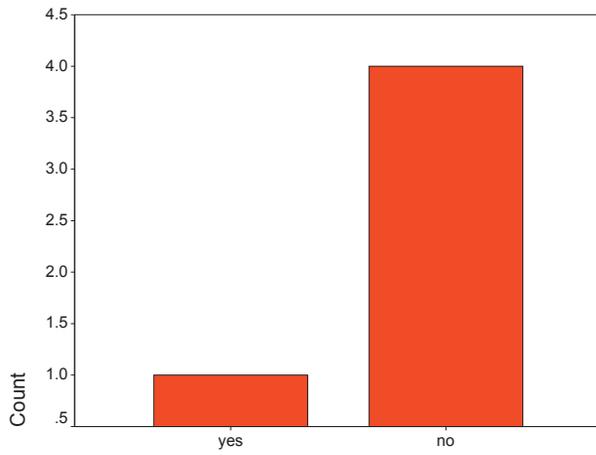
**Q8q: Specify**

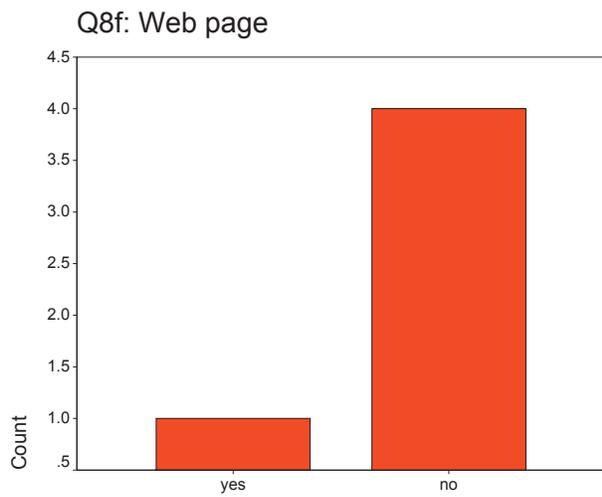
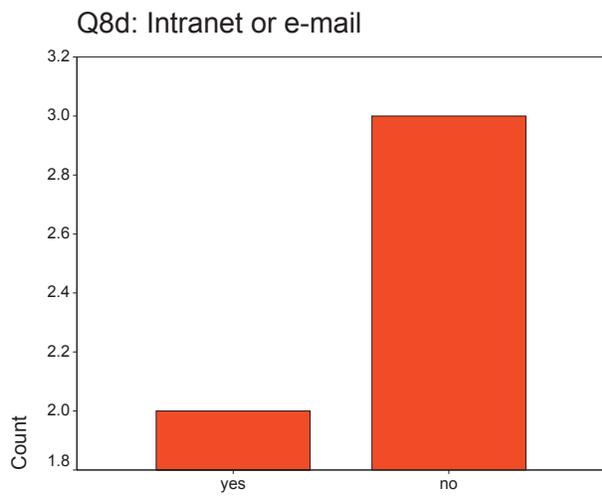
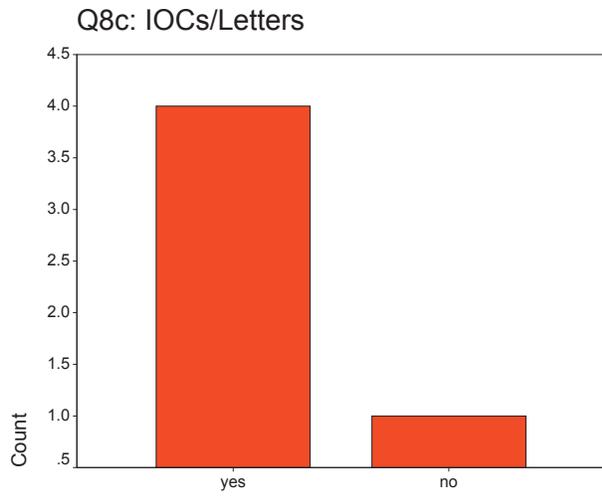
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
participation	1	20.0	20.0	80.0
process contracts and payments	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q8a: Transcript newsletter**

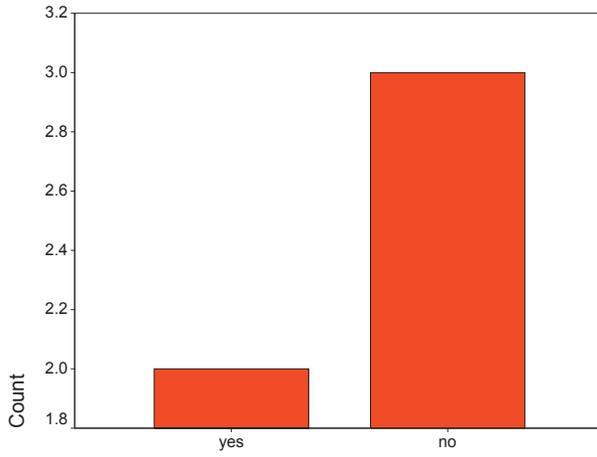


**Q8b: Moving forward newsletter**

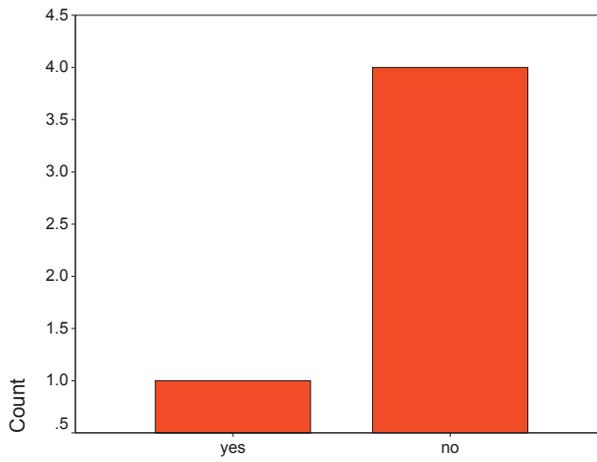




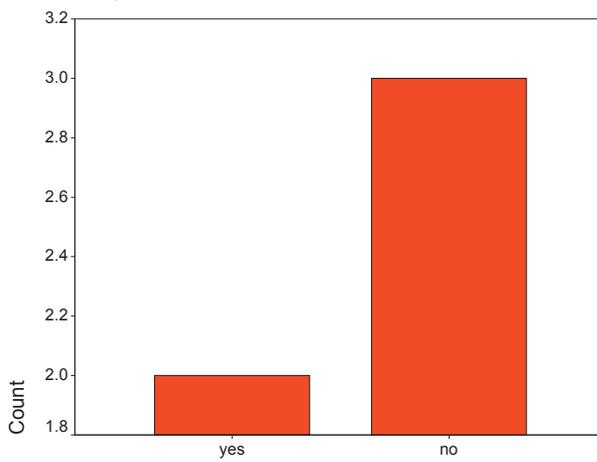
Q8g: Conference such as OTEC

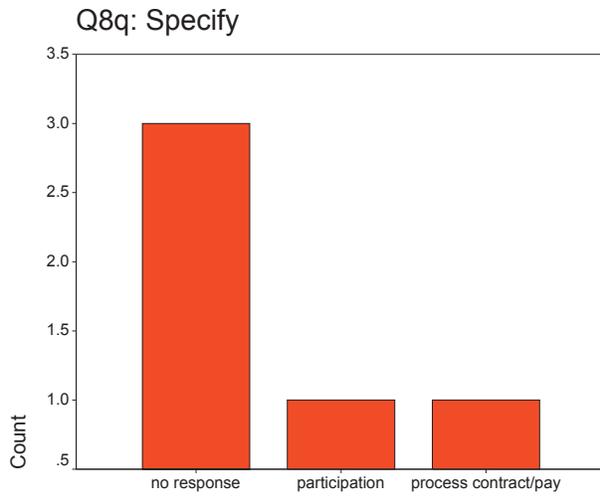


Q8l: Colleagues



Q8p: Other

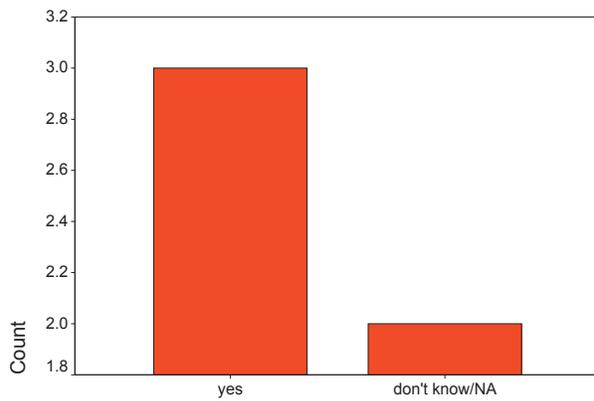




**Q9: Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
don't know/not applicable	2	40.0	40.0	100.0
Total	5	100.0	100.0	

Q9: Do you find the research office to be accessible?



**Q10: Are you aware of research activities that resulted in the following:**

**Q10a: Personnel cost saving**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q10a1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
several	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q10b: Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q10b1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
several	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q10c: Safety improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q10c1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q10d: Quality improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q10d1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
several	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q10e: Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q10e1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid several	4	80.0	80.0	80.0
Total	5	100.0	100.0	100.0

**Q10f: Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q10f1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid several	4	80.0	80.0	80.0
Total	5	100.0	100.0	100.0

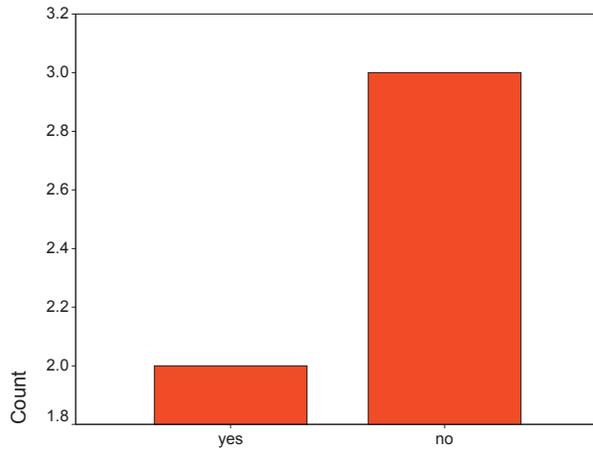
**Q10g: Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

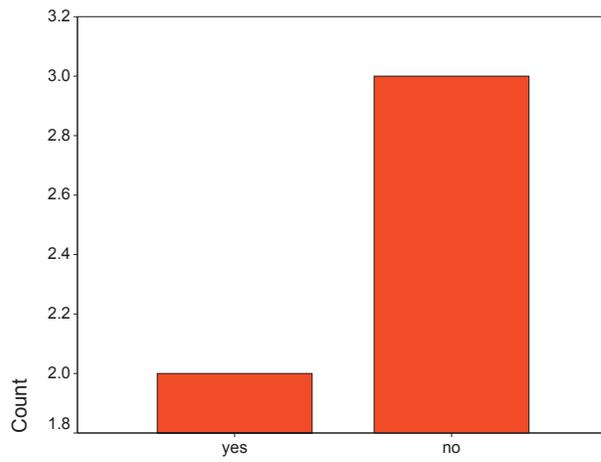
**Q10g1: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

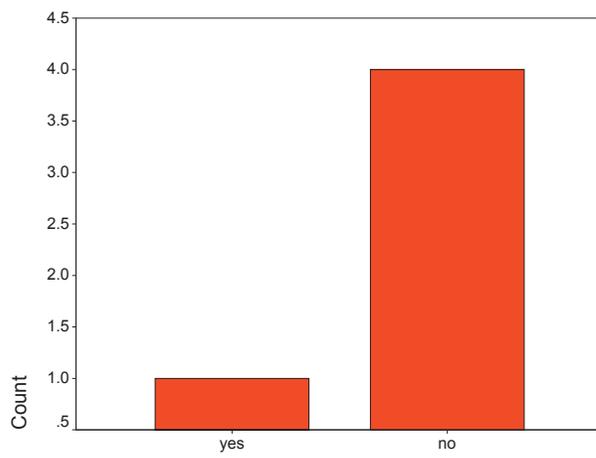
Q10a: Personnel Cost Savings

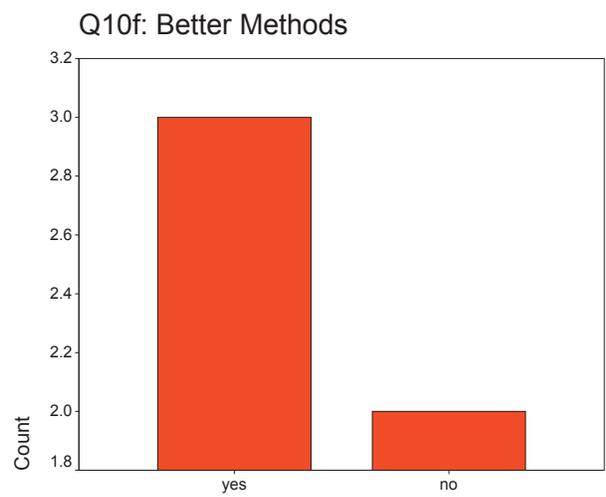
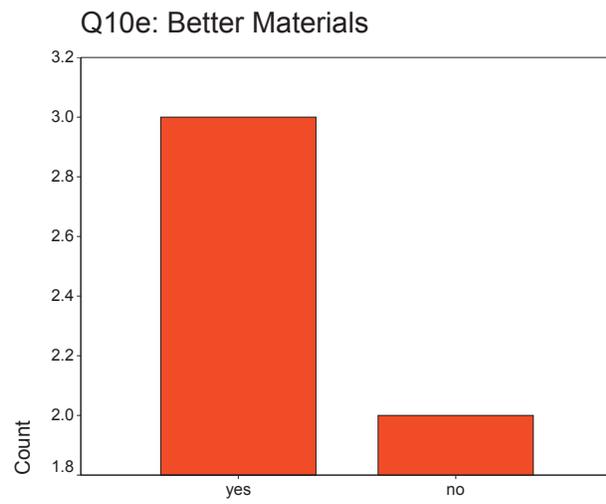
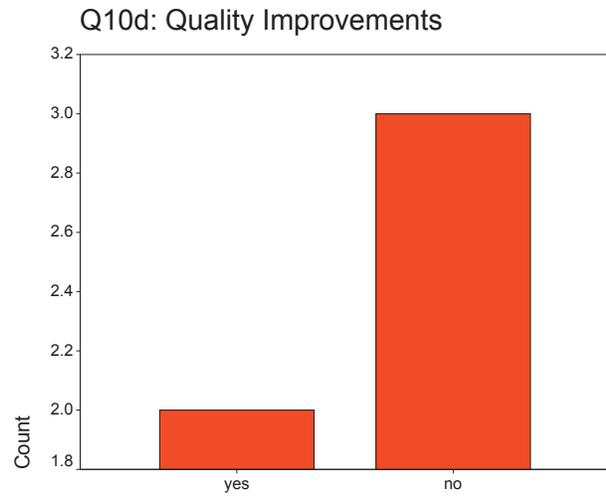


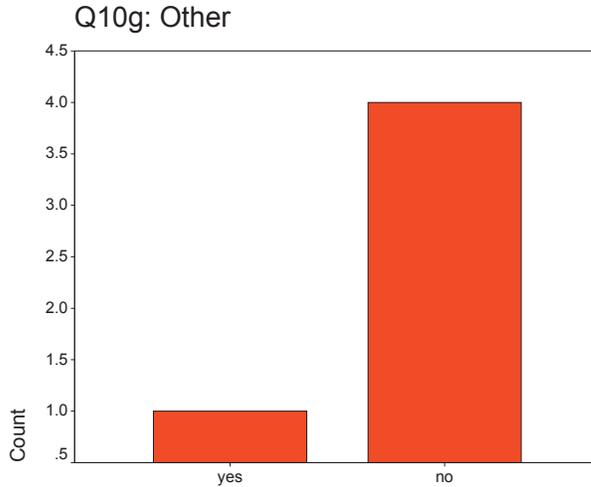
Q10b: Other Cost Savings



Q10c: Safety Improvements







**Q11: Have you heard of any of the following specific research projects? (note all that apply)**

**Q11a: SHRP pavement project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

**Q11b: Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

**Q11c: Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

**Q11d: Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11e: Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

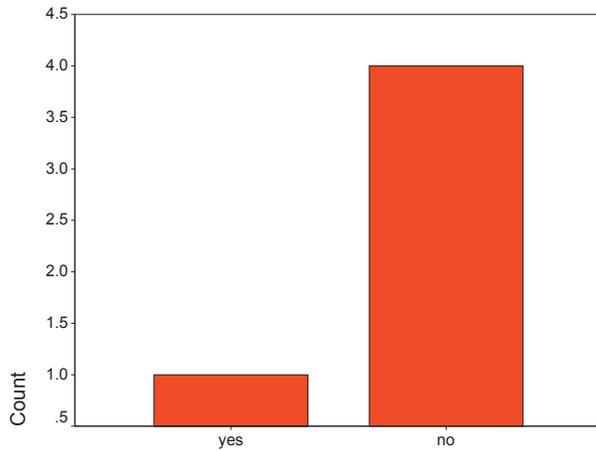
**Q11f: Innovative Bridge Design Construction Techniques to Expedite Construction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

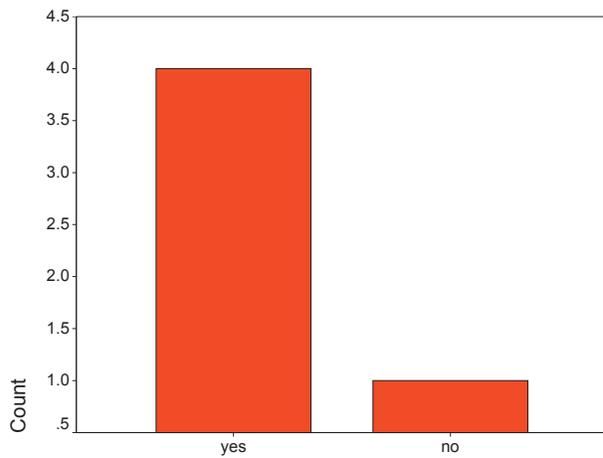
**Q11g: Comparison and Definition of State DOT Practices in Selection**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Q11d: Evaluation of Drainable Bases Under



Q11g: Comparison and Definition



**Q11a: How did you hear of them? (note all that apply)****Q11a1: Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Q11a2: Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11a3: Memoranda / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q11a4: Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11a5: Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11a6: Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11a7: Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q11a8: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q11a9: Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q11a10: Media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q11a11: Colleagues**

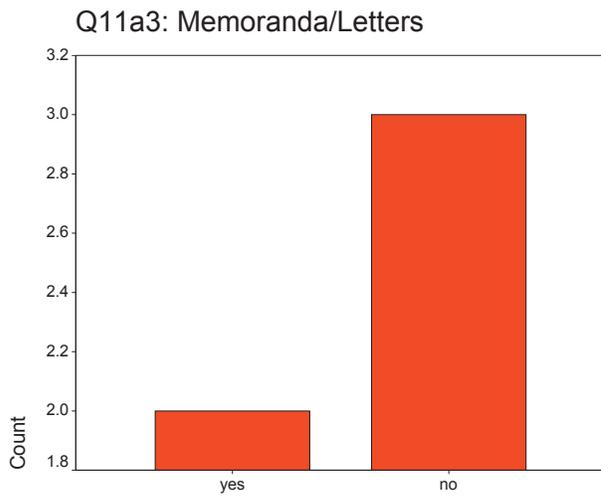
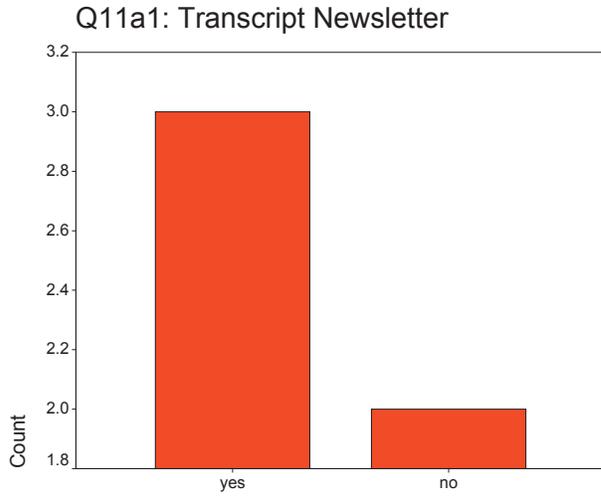
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

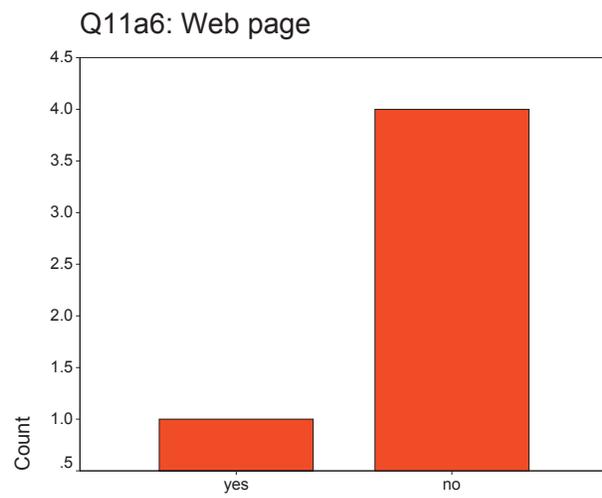
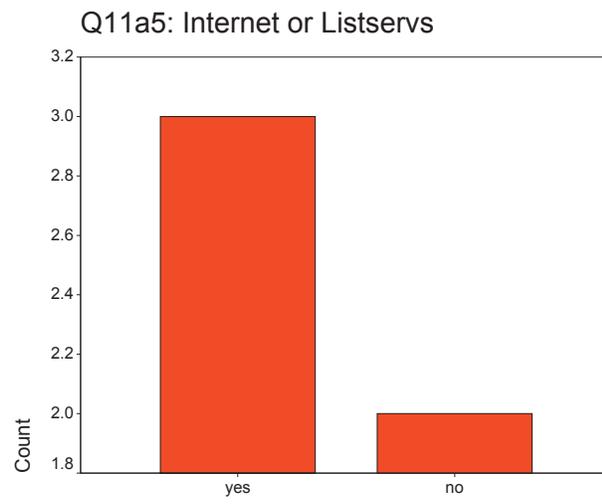
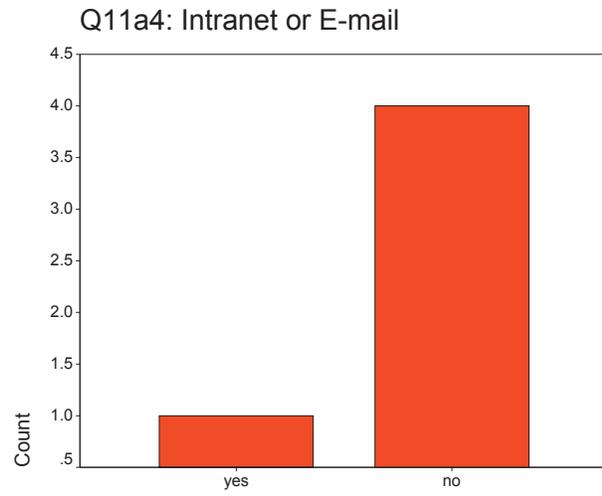
**Q11a12: Other**

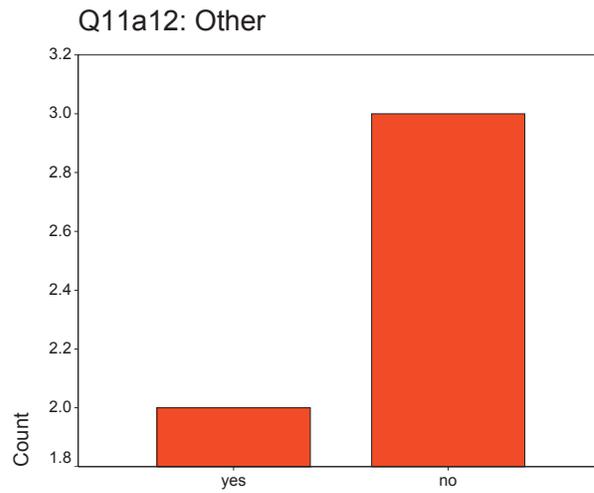
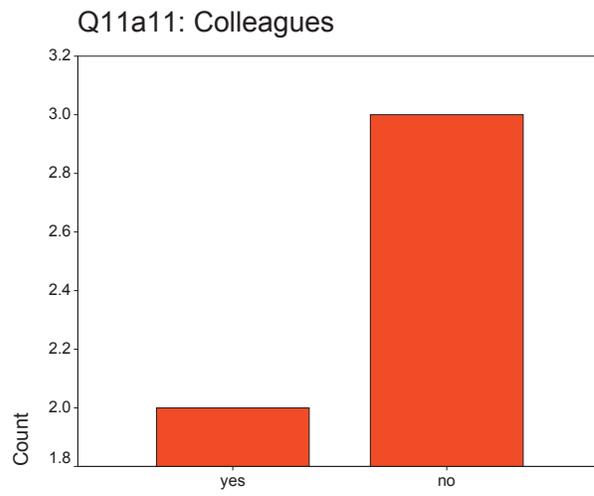
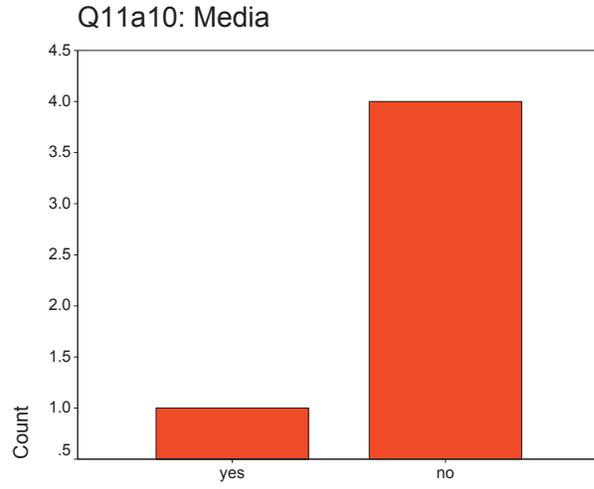
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

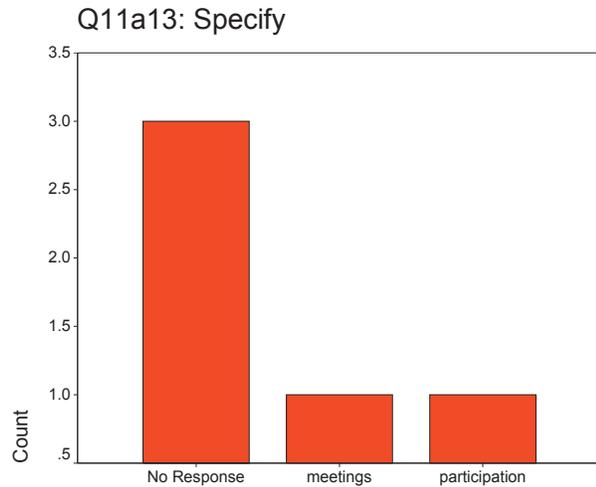
**Q11a13: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
meetings, "studies" not Research Program specifically	1	20.0	20.0	80.0
participation	1	20.0	20.0	100.0
Total	5	100.0	100.0	









**Q12: What kinds of limitations, if any, do you believe the Research Office faces? (note all that apply)**

**Q12a: Inadequate staffing**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q12b: Inadequate funding**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q12c: Inadequate support from sponsors**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q12d: Risk of no payoff**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q12e: Political considerations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q12f: No significant limitations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

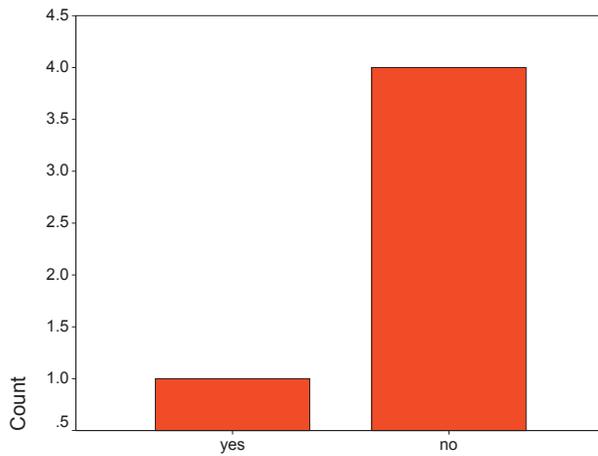
**Q12g: Other**

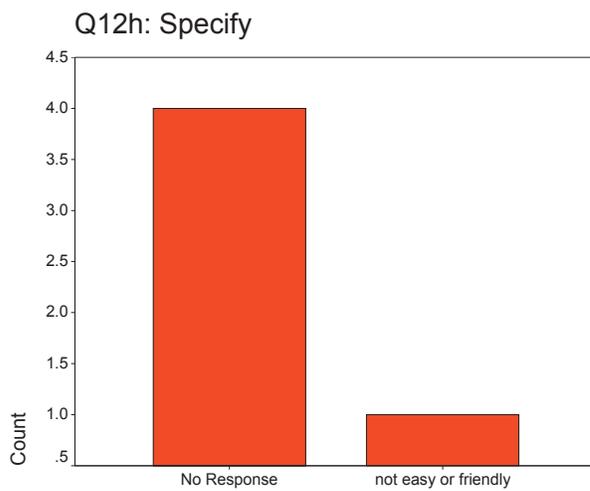
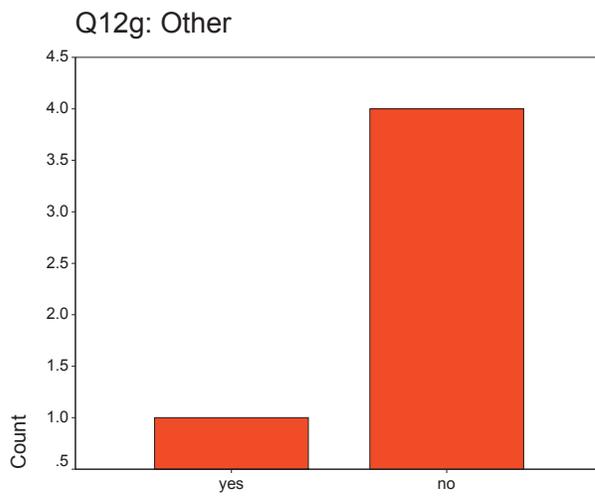
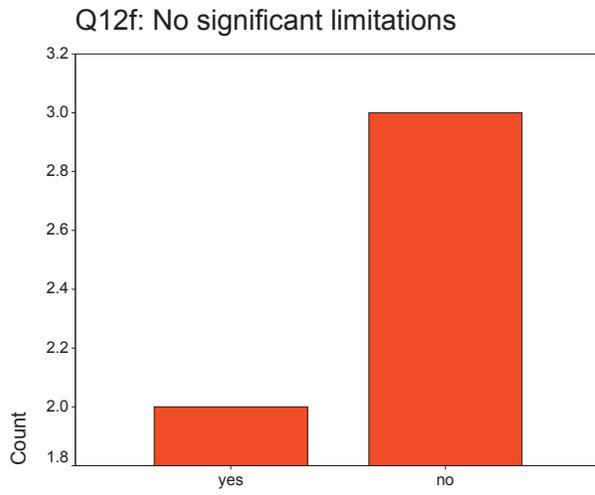
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q12h: Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
not an easy or friendly process to read and submit request; info too technical in nature	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q12c: Inadequate support from sponsors**





**Q13: What is your preferred source of information about the research program? How could the Research Office best keep in touch with you?**

**Q13a: Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q13b: Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q13c: IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q13d: Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q13e: Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q13f: Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Q13g: specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Q13h: Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q13i: Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q13j: Colleagues**

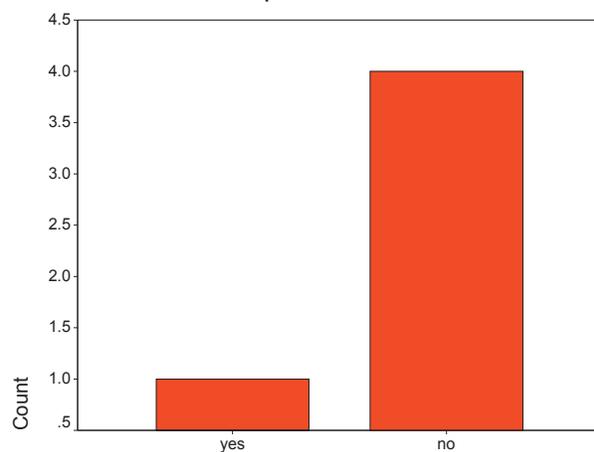
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Q13k: Other**

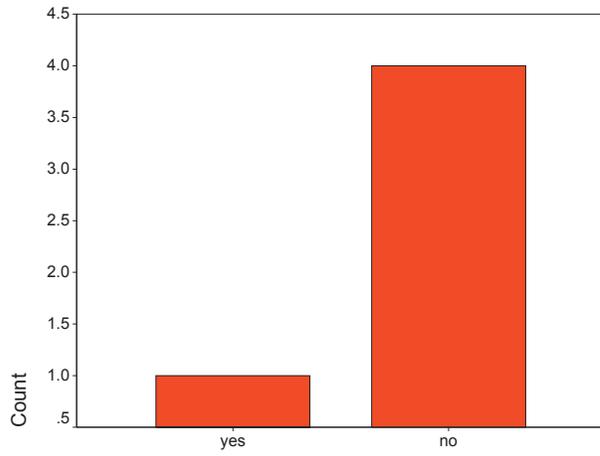
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q13l: Specify**

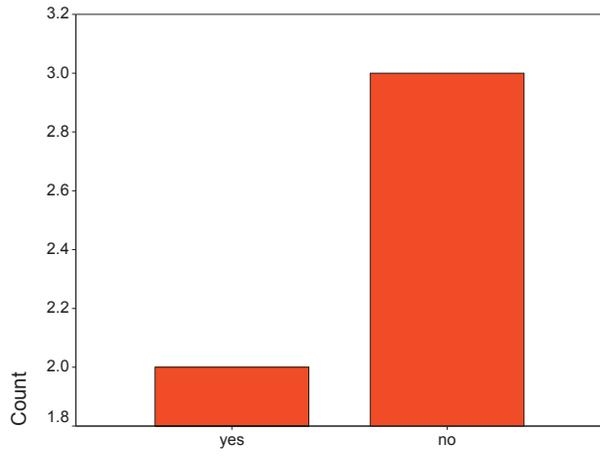
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
meetings	1	20.0	20.0	80.0
participation	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q13a: Transcript Newsletter**

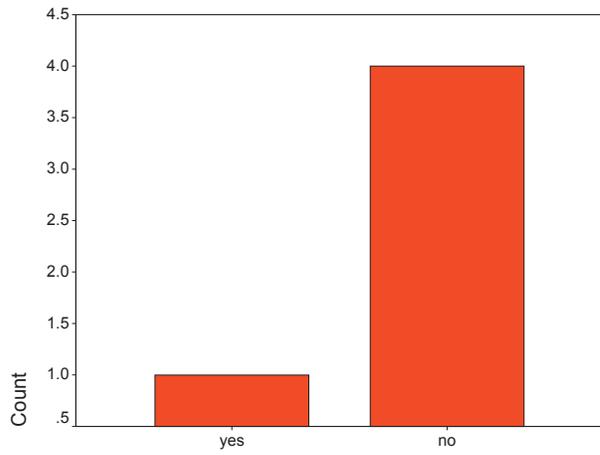
Q13b: Moving Forward research newsletter

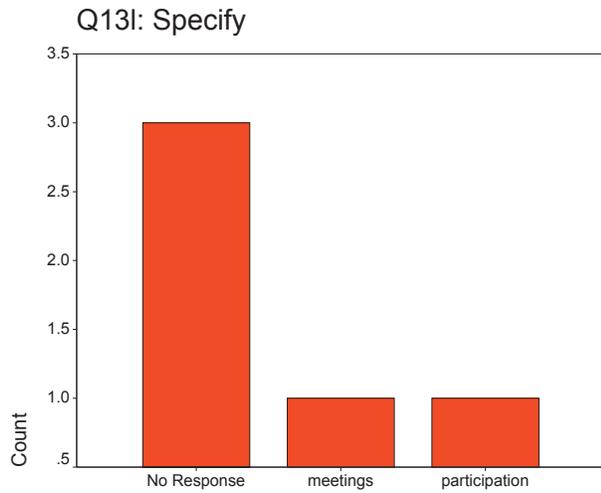
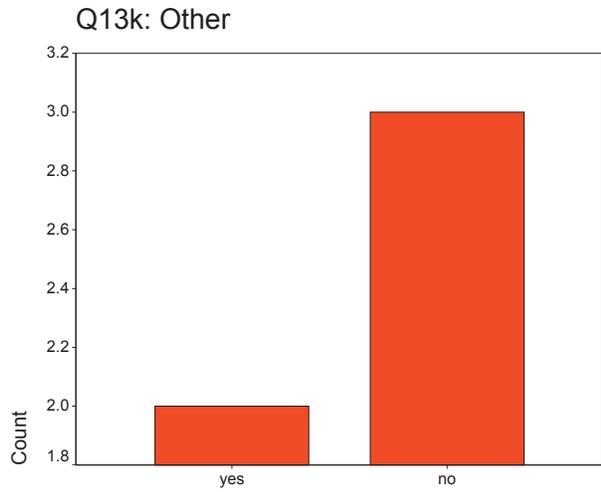


Q13c: IOCs/Letters



Q13f: Conferences such as OTEC

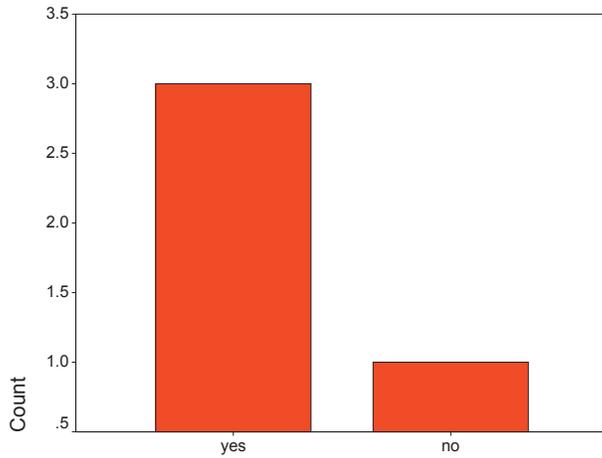




**Q14: Do you feel that you are part of the research program's strategic planning process?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	60.0	75.0	75.0
	no	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

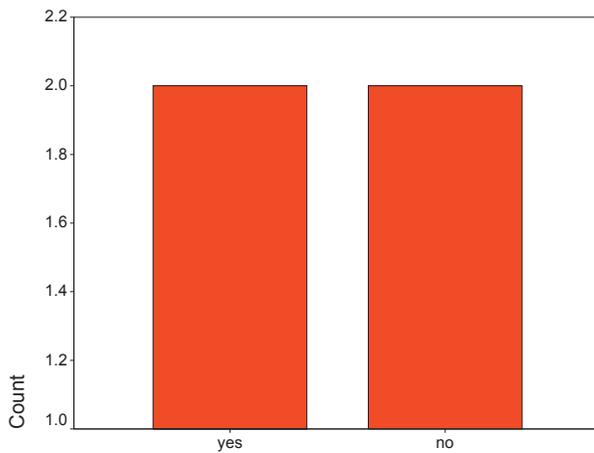
Q14: Feel part of strategic planning



Q15: Do you feel that you have input into the research program at the project level?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	40.0	50.0	50.0
	no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

Q15: Feel you have input?



Q16: What types of research activities are you most interested in knowing about?

Q16a: Requests for Proposals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	80.0	100.0	100.0
Missing	System	1	20.0		
Total		5	100.0		

**Q16b: Ohio's success stories**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q15c: Best practices (local, national, etc.)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	60.0	75.0	75.0
	no	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q16d: Technical innovations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q16e: Technology transfer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q16f: Research management process**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**Q16g: Strategic research plan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

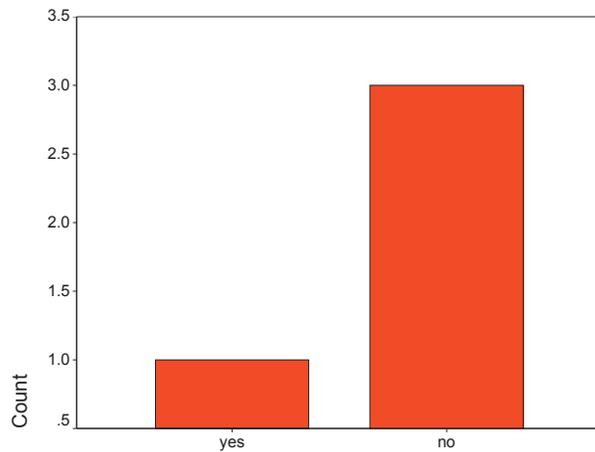
**Q16h: Training opportunities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	40.0	50.0	50.0
	no	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

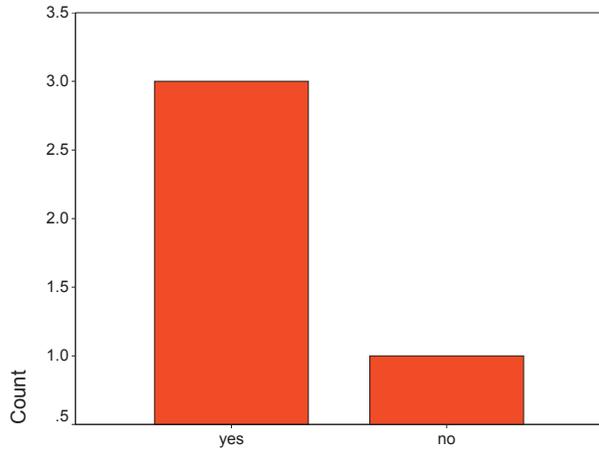
**Q16i: Implementation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	25.0	25.0
	no	3	60.0	75.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

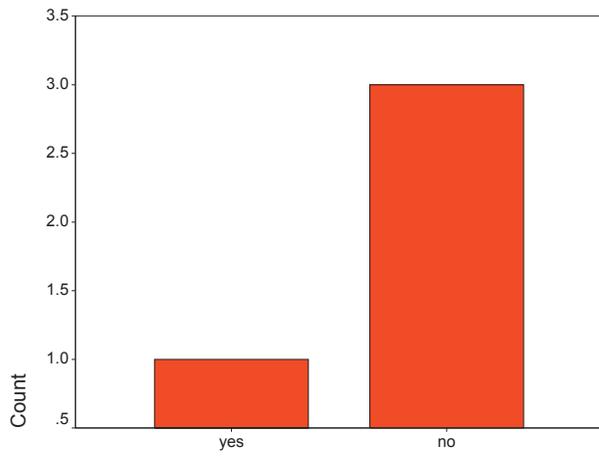
**Q16b: Ohio's Success Stories**



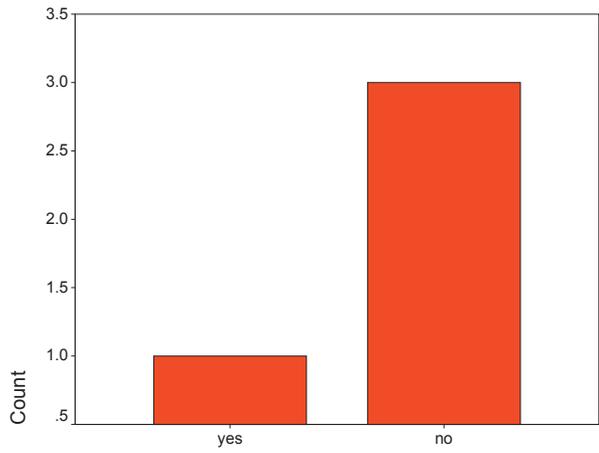
Q16c: Best Practices (local, national, etc)



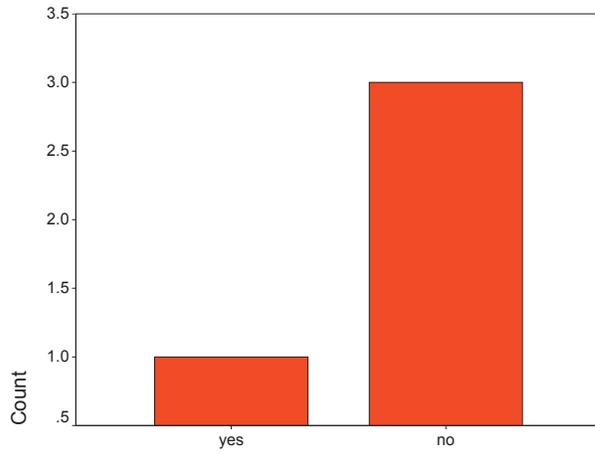
Q16d: Technical Innovations



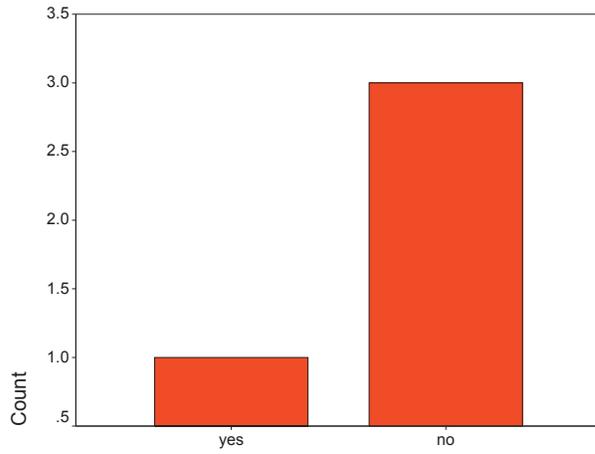
Q16e: Technology Transfer



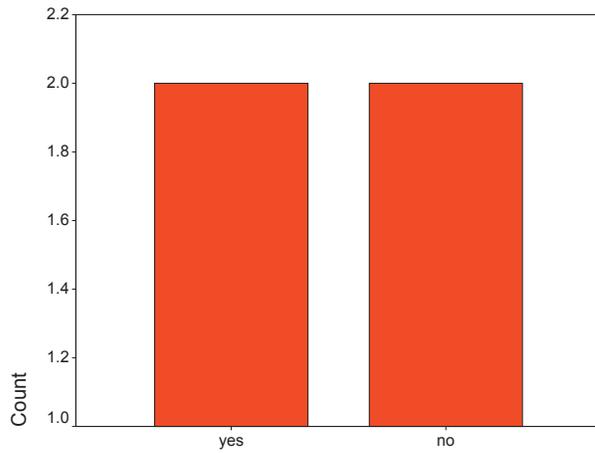
Q16f: Research Management Process

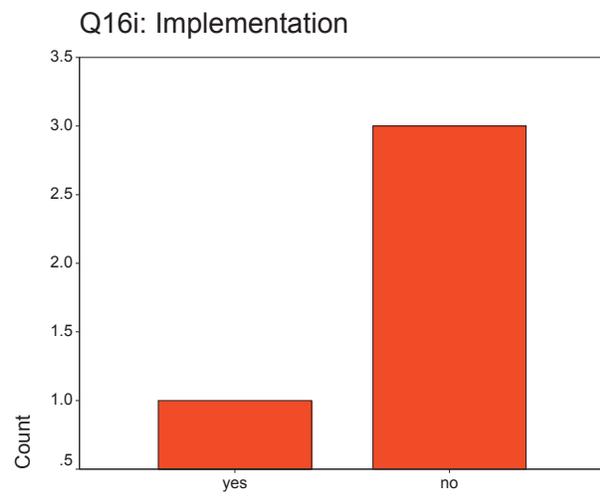


Q16g: Strategic Research Plan



Q16h: Training Opportunities





**Appendix C**  
**Technical Liaisons**  
**Survey Results**

**Q1: What is your working title (e.g., project engineer)?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
Asphalt Materials Engineer	1	7.7	7.7	15.4
Assistant Environmental Administrator	1	7.7	7.7	23.1
dist.survey operations mgr	1	7.7	7.7	30.8
Environmental Liaison (previously Assistant Environmental Administrator)	1	7.7	7.7	38.5
Geology Program Supervisor	1	7.7	7.7	46.2
Geotechnical Engineer	1	7.7	7.7	53.8
major projects coord.	1	7.7	7.7	61.5
Pavement Design Coordinator	1	7.7	7.7	69.2
Pavement Research Engineer	1	7.7	7.7	76.9
Special Projects coordinator	1	7.7	7.7	84.6
Standards Engineer	1	7.7	7.7	92.3
structural engineer	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note: Talled results:

engineer	38%
coordinator	23%
administrator	8%
mgr	8%
liason	8%
supervisor	8%

**Q2: What is your work classification (e.g., TE 3)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
Assistant Environmental Administrator	1	7.7	7.7	15.4
Geology Program Supervisor	1	7.7	7.7	23.1
Liaison Officer 2	1	7.7	7.7	30.8
SOM	1	7.7	7.7	38.5
TE 4	5	38.5	38.5	76.9
TE 5	1	7.7	7.7	84.6
Transportation Engineer 4	2	15.4	15.4	100.0
Total	13	100.0	100.0	

**Q3: In what division/office are you employed?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
Ashland, DO 3 construction	1	7.7	7.7	15.4
Construction/Materials Management	1	7.7	7.7	23.1
District 1	1	7.7	7.7	30.8
Division of Planning, Office of Geotechnical Engineering	1	7.7	7.7	38.5
Division of Production Management/Office of Environment	1	7.7	7.7	46.2
FHWA Ohio Division Office	1	7.7	7.7	53.8
Office of Environmental Services	1	7.7	7.7	61.5
Office of Geotechnical Engineering	2	15.4	15.4	76.9
Office of Roadway Engineering	1	7.7	7.7	84.6
Planning/Office of Pavement Engineering	2	15.4	15.4	100.0
Total	13	100.0	100.0	

a.

Note: Most common division/offices:

office of engineering 46%

office of management 15%

**Q4: How many years have you been employed in your current position?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 13	3	23.1	23.1	23.1
.5	1	7.7	7.7	30.8
1	1	7.7	7.7	38.5
1.5 (but 28 years in OES)	1	7.7	7.7	46.2
12	1	7.7	7.7	53.9
15	1	7.7	7.7	61.6
2	2	15.4	7.7	76.9
3	1	7.7	7.7	84.6
8	1	7.7	7.7	92.4
6	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note:

less than 1 year            7.7%  
 1 to 3 years                38.5%  
 more than 3 years        53.8%

**Q5: To what degree would you say you are involved in the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 very involved	6	46.2	46.2	46.2
2 somewhat involved	6	46.2	46.2	92.3
3 not very involved	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q5A In what way are you involved?****Q5A1 Project monitor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	10	76.9	83.3	83.3
	2 no	2	15.4	16.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q5A2 Supplied research needs/project ideas**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	10	76.9	83.3	83.3
	2 no	2	15.4	16.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q5A3 Implementation of a product of the research program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	7	53.8	58.3	58.3
	2 no	5	38.5	41.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q5A4 Reviewed research proposals being considered for funding**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	12	92.3	100.0	100.0
Missing	System	1	7.7		
Total		13	100.0		

**Q5A5 Reviewed final reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	10	76.9	83.3	83.3
	2 no	2	15.4	16.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q5A6 Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	7.7	8.3	8.3
	2 no	11	84.6	91.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

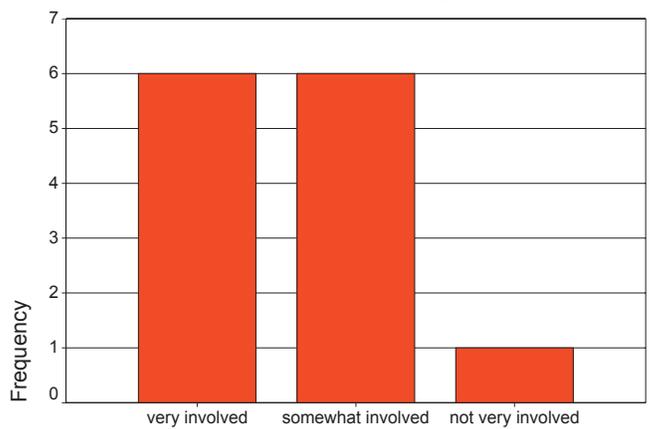
**Q5A7 Specify**

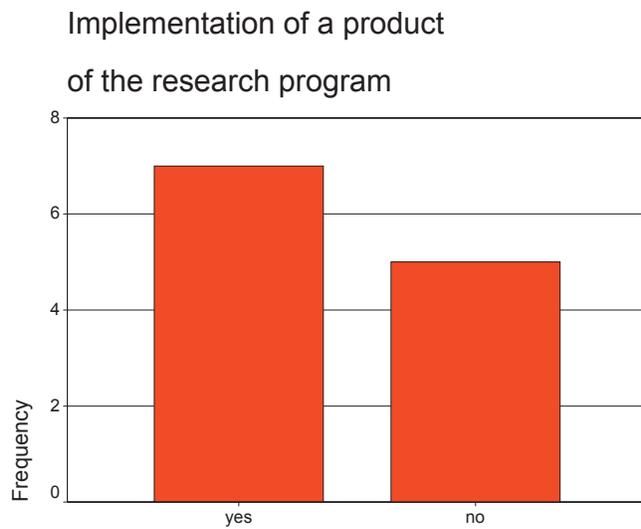
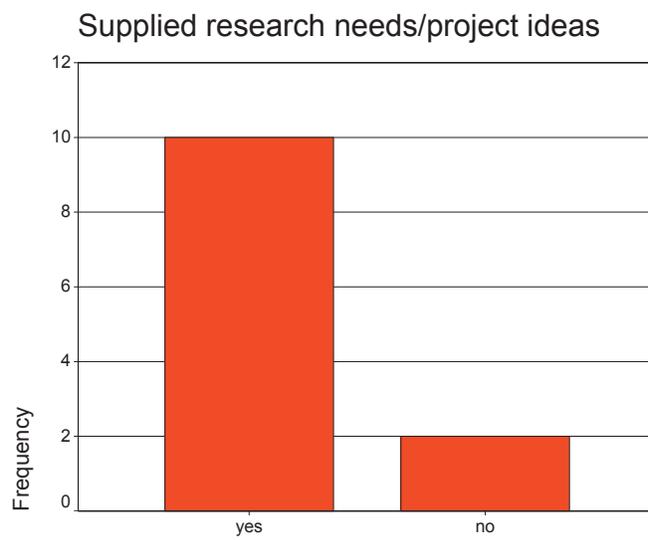
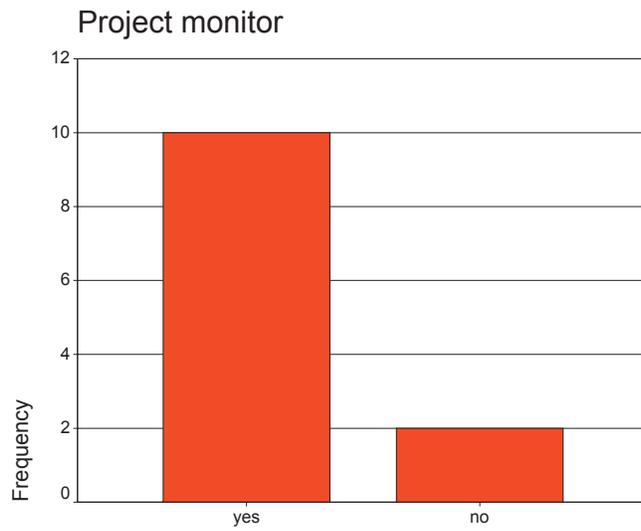
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	92.3	92.3	92.3
	Assist in the collection of data by providing plan information, test results, etc.	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

**Q5B What is the main reason for your lack of involvement?**

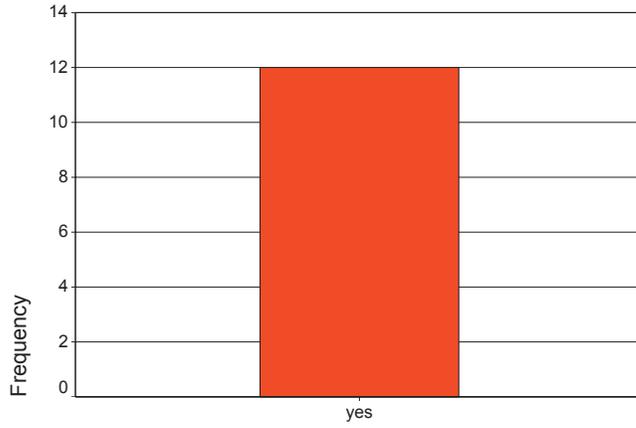
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		11	84.6	84.6	84.6
	time	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

To what degree would you say you are involved in the research program?

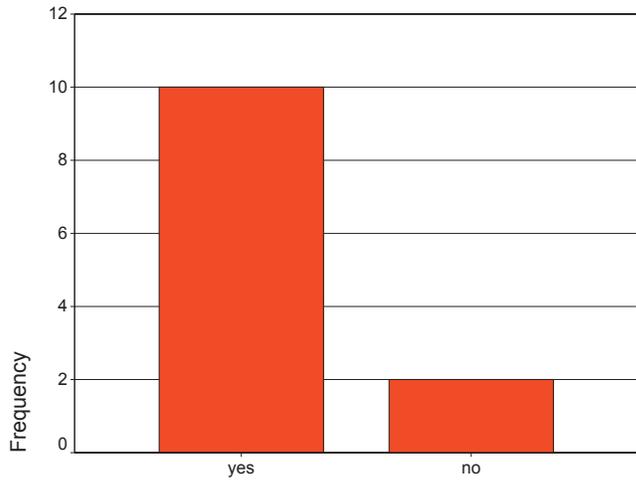


**In what way are you involved?**

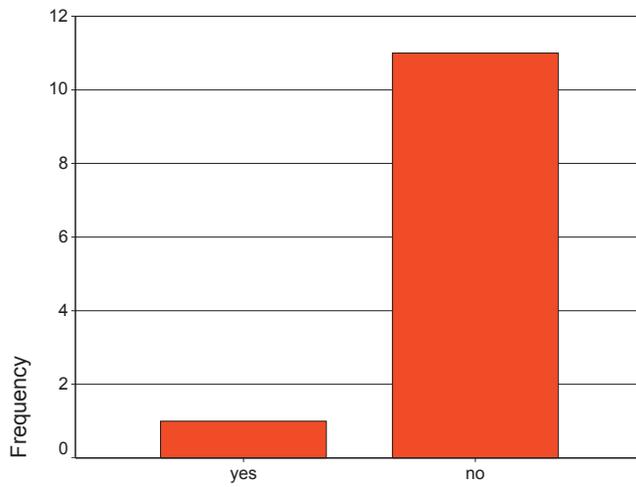
Reviewed research proposals being considered for funding



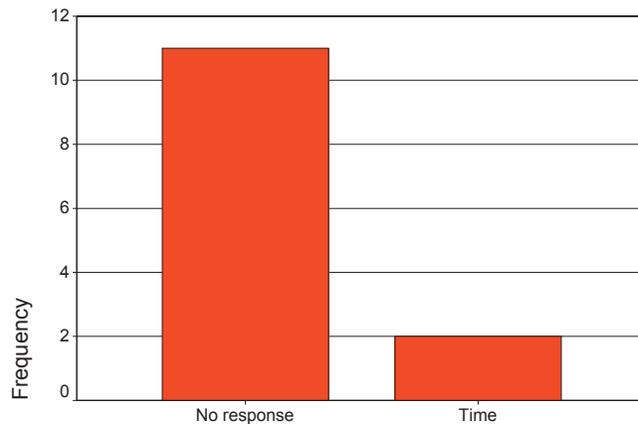
Reviewed final reports



Other



What is the main reason  
for your lack of involvement?



**Q6: What is your motivation for being involved in the research program? (please select all that apply)**

**Q6A Part of job description**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q6B To extend my knowledge in my field**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	69.2	69.2	69.2
2 no	4	30.8	30.8	100.0
Total	13	100.0	100.0	

**Q6C To interact with researchers and engage in different activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	7	53.8	53.8	53.8
2 no	6	46.2	46.2	100.0
Total	13	100.0	100.0	

**Q6D To provide solutions to technical problems relating to my unit**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	13	100.0	100.0	100.0

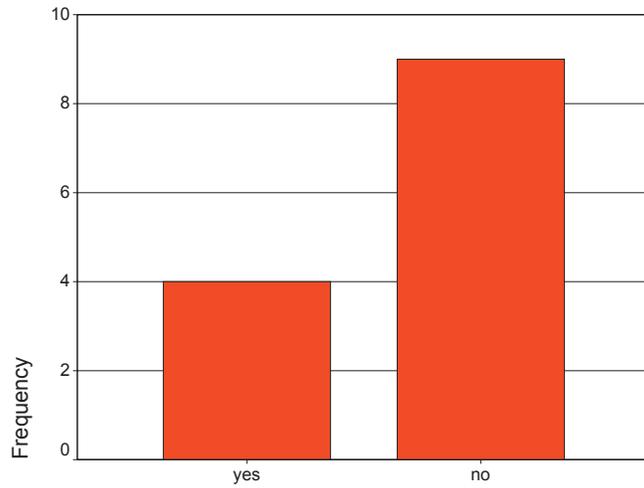
**Q6E Other**

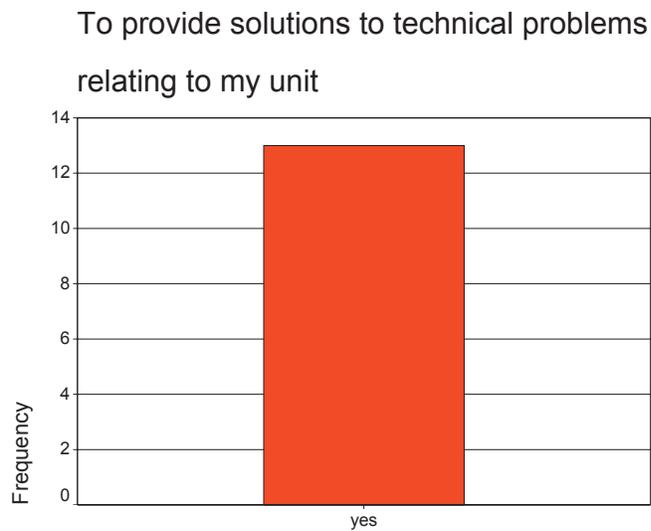
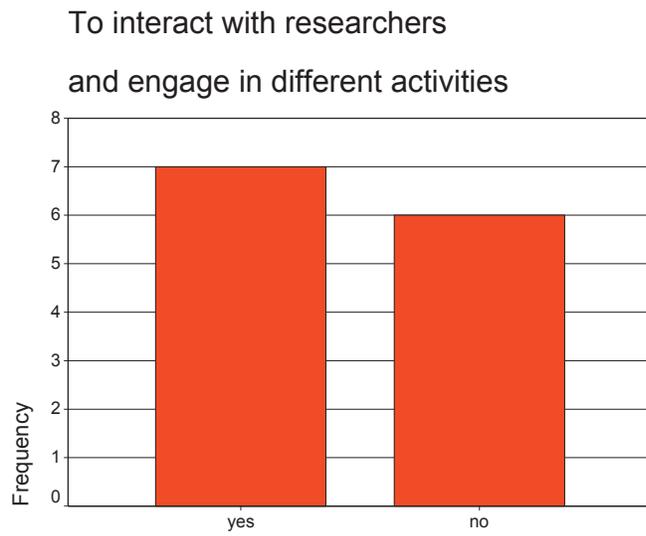
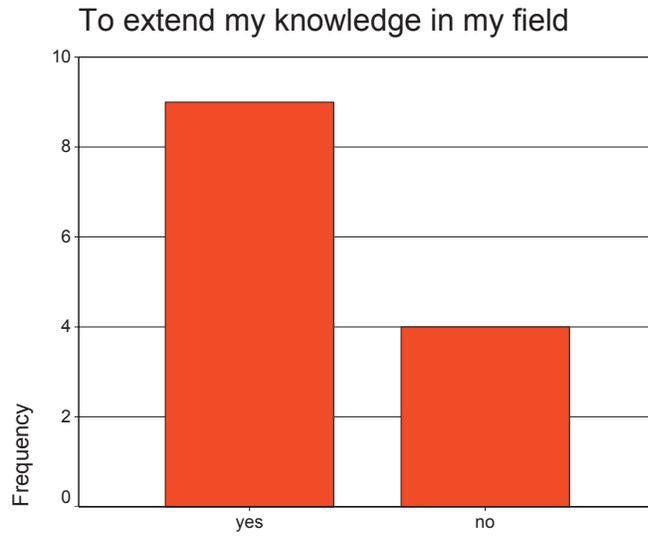
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	23.1	23.1
	2 no	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

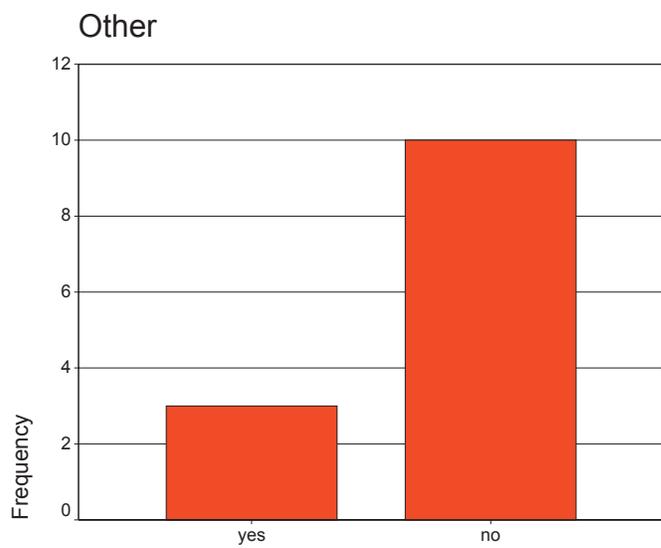
**Q6F Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	76.9	76.9	76.9
exposure to new research, ideas, department's future	1	7.7	7.7	84.6
To advance the knowledge nationally	1	7.7	7.7	92.3
To ensure that our environmental impact analysis is current and we are utilizing the best available methods to collect and analyzed data.	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Part of job description







**Q7: What do you like most about being involved in the research program?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
Ability to influence outcome and direct work to solve identified needs.	1	7.7	7.7	15.4
applying results from question #6	1	7.7	7.7	23.1
don't like it. findings not practical. researchers summarize with opinion, not data	1	7.7	7.7	30.8
Expanding my knowledge, meeting contacts, improving the product we provide.	1	7.7	7.7	38.5
Having the opportunity to solve problems. The ability to work with state of the art equipment and techniques.	1	7.7	7.7	46.2
Helping to develop practical applications of new technology to my day-to-day problem solving work.	1	7.7	7.7	53.8
Interacting with a variety of people on issues related to a work problem	1	7.7	7.7	61.5
interaction with researchers	1	7.7	7.7	69.2
Keeping in touch with the science behind our work and having contacts who are in the forefront of technology. Being able to go to these researchers to discuss problems and solutions for our real world problems.	1	7.7	7.7	76.9
Solving problems, providing tools to help make decisions	1	7.7	7.7	84.6
Working on interesting problems with interesting people.	1	7.7	7.7	92.3
working with researchers	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note: Most common aspects that interviewees like to be involved in the research program:

interaction with people 46%

solve problems 31%

**Q8: What do you like the least?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
amount of time needed to adequately respond to research questions and related research issues (e.g. this survey as one example), when my work has to take a back seat	1	7.7	7.7	15.4
I do not have enough time to provide close tracking/liaison to projects.	1	7.7	7.7	23.1
Keeping track of the researcher and what he has promised to do, what he has done, and what he has left to do. I don't really do this much.	1	7.7	7.7	30.8
Nothing	1	7.7	7.7	38.5
paperwork	1	7.7	7.7	46.2
Reading reports I am not interested in.	1	7.7	7.7	53.8
red tape	1	7.7	7.7	61.5
The bureaucracy. Lack of interest of senior management.	1	7.7	7.7	69.2
The paper work and drudgery of the research process. It is very difficult to do a 40+ hour job and be involved with research at ODOT	1	7.7	7.7	76.9
Time requirements and researchers who are not cooperative or responsive.	1	7.7	7.7	84.6
too long to solve problems.	1	7.7	7.7	92.3
Very bureaucratic process	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note: Most common aspects that interviewees least like:

bureaucratic process 31%  
time-consuming 31%  
paperwork 15%

**Q9: How has your involvement enhanced your professional development?a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7.7	7.7	7.7
The knowledge I have gained from participating in research projects is very valuable in my current position. I have also received appointments to TRB committees, NCHRP panels and FHWA project panels as a result of my knowledge.	1	7.7	7.7	15.4
GPS	1	7.7	7.7	23.1
hopefully, I have a better understanding of the nuiances of my job - with information learned from these research projects, I can supply better information about situations, products, designs, etc. to internal and external customers	1	7.7	7.7	30.8
I have learned alot	1	7.7	7.7	38.5
Increased technical knowledge from interaction with researchers and technical experts and by studying other techncial documents to be prepared to participate in research reviews. I have also developed very helpful contacts with others.	1	7.7	7.7	46.2
Involvement with knowledgeable people and challenging problems	1	7.7	7.7	53.8
It has helped to keep me current in my field and has gotten me involved with related activities at TRB.	1	7.7	7.7	61.5
Moderately -- Its more about answering or addressing an issue or problem we've encountered, rather than my personal, professional development	1	7.7	7.7	69.2
undetermined	1	7.7	7.7	76.9
very little	1	7.7	7.7	84.6
Yes, by expanding my knowledge and contacts.	1	7.7	7.7	92.3
Yes.	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note: Most common professional development enhanced through interviewees' involvement:

gain knowledge 38%

better understanding of the job 15%

**Q10: How has your involvement improved the efficiency or effectiveness of your job or program?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
helps keep me current	1	7.7	7.7	7.7
improve safety	1	7.7	7.7	15.4
improved decision making	1	7.7	7.7	23.1
In numerous ways the products I deal with have been improved	1	7.7	7.7	30.8
Increased knowledge helped understand and resolve problems on projects. Technology transfer of knowledge and practice learned in research improved future projects.	1	7.7	7.7	38.5
It has helped to keep out environmental analysis scientifically valid and has provided answers to several questions concerning environmental issues.	1	7.7	7.7	46.2
Moderately -- we are still working on some research problems and haven't really implemented anything yet.	1	7.7	7.7	53.8
none	1	7.7	7.7	61.5
not yet - no projects have actually been researched or even funded, so I've devoted quite a bit of up front energy to attend workshops, develop problem statements, write proposals, review my proposals, review other ODOT proposals, etc (see question #8)	1	7.7	7.7	69.2
The program has provided answers that help us decrease cost, improve performance, and/or advance our knowledge of pavements.	1	7.7	7.7	76.9
We have better tools, more accurate tools and faster tools	1	7.7	7.7	84.6
Yes, by a very small amount.	1	7.7	7.7	92.3
Yes, by providing a better product.	1	7.7	7.7	100.0
Total	13	100.0	100.0	

a.

Note: Most common improvement

improve work process 31%

provide answers 31%

**Q11: Regardless of your level of involvement, please rate the following activities you expect from the research program. (please rate)**

**Q11A To solve problems for constituents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	3	23.1	23.1	23.1
2 somewhat priority	5	38.5	38.5	61.5
3 high priority	4	30.8	30.8	92.3
4 very high priority	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q11B To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	1	7.7	7.7	7.7
1 not a priority	8	61.5	61.5	69.2
2 somewhat priority	4	30.8	30.8	100.0
Total	13	100.0	100.0	

**Q11C To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	4	30.8	30.8	30.8
2 somewhat priority	2	15.4	15.4	46.2
3 high priority	7	53.8	53.8	100.0
Total	13	100.0	100.0	

**Q11D To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	1	7.7	7.7	7.7
2 somewhat priority	3	23.1	23.1	30.8
3 high priority	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q11E To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 not a priority	3	23.1	23.1	23.1
2 somewhat priority	3	23.1	23.1	46.2
3 high priority	6	46.2	46.2	92.3
4 very high priority	1	7.7	7.7	100.0
Total	13	100.0	100.0	

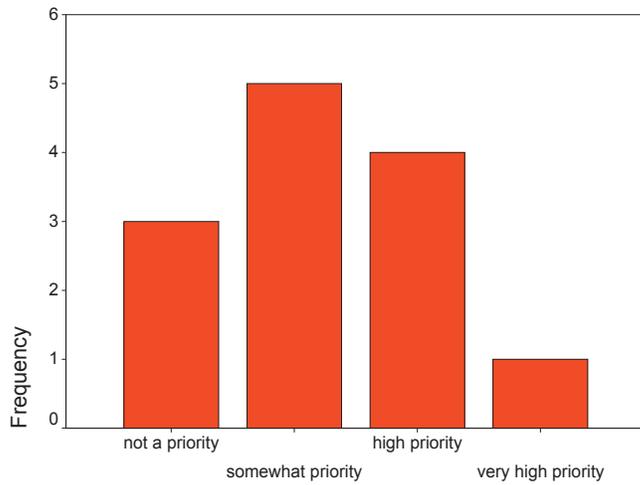
**Q11F Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	1	7.7	50.0	50.0
	3 high priority	1	7.7	50.0	100.0
	Total	2	15.4	100.0	
Missing	System	11	84.6		
Total		13	100.0		

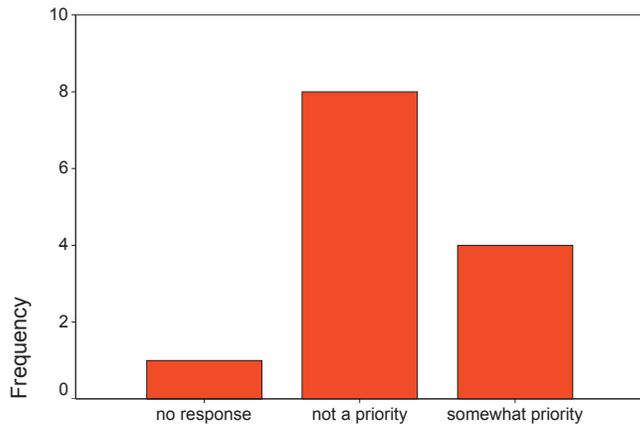
**Q11G Specify**

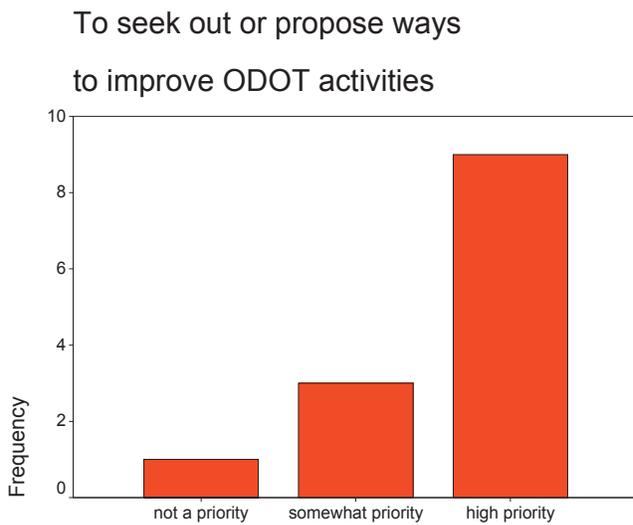
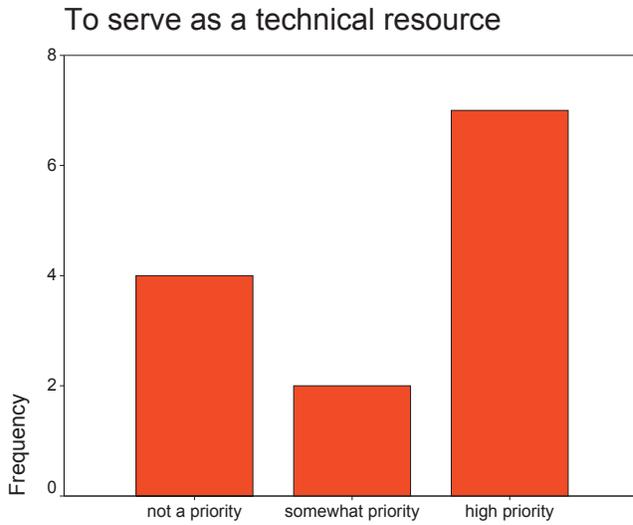
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	To solve	12	92.3	92.3	92.3
	Total	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

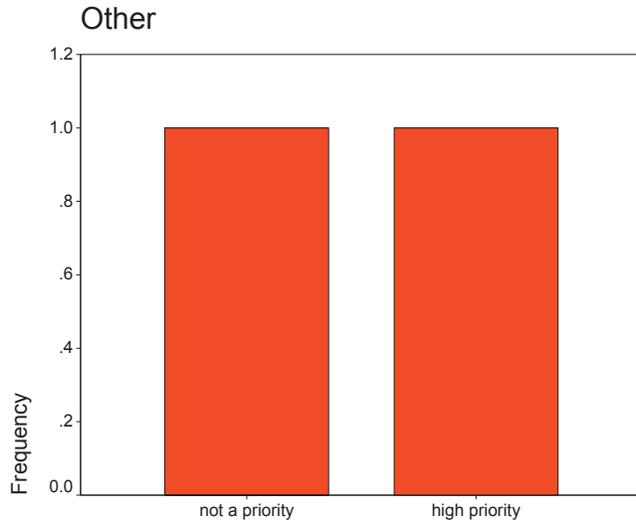
To solve problems for constituents



To attain national recognition for Ohio and ODOT







**Q12: Please rate the following ODOT research program stake holders according to level of priority. (please rate)**

**Q12A The research community**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	7	53.8	77.8	77.8
	3 high priority	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

**Q12B ODOT engineers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	1	7.7	9.1	9.1
	2 somewhat priority	4	30.8	36.4	45.5
	3 high priority	6	46.2	54.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

**Q12C ODOT managers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	1	7.7	10.0	10.0
	2 somewhat priority	4	30.8	40.0	50.0
	3 high priority	5	38.5	50.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

**Q12D The traveling public**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	4	30.8	36.4	36.4
	2 somewhat priority	2	15.4	18.2	54.5
	3 high priority	5	38.5	45.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

**Q12E Other DOTs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	4	30.8	44.4	44.4
	2 somewhat priority	4	30.8	44.4	88.9
	3 high priority	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

**Q12F Particular unit(s) or division(s) within ODOT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not a priority	2	15.4	40.0	40.0
	2 somewhat priority	1	7.7	20.0	60.0
	3 high priority	2	15.4	40.0	100.0
	Total	5	38.5	100.0	
Missing	System	8	61.5		
Total		13	100.0		

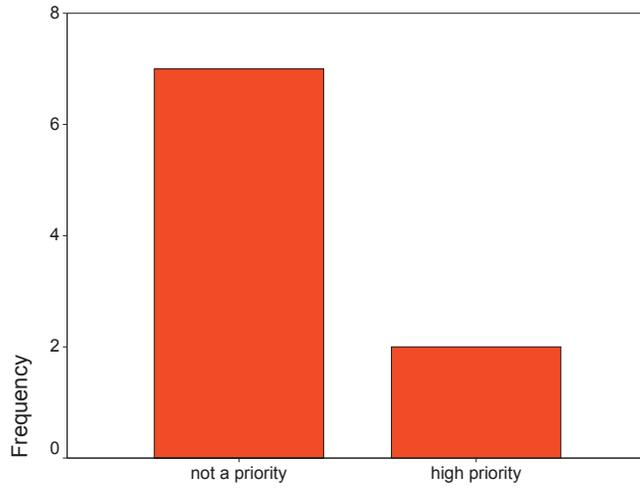
**Q12G Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	100.0	100.0	100.0
	Total	13	100.0	100.0	

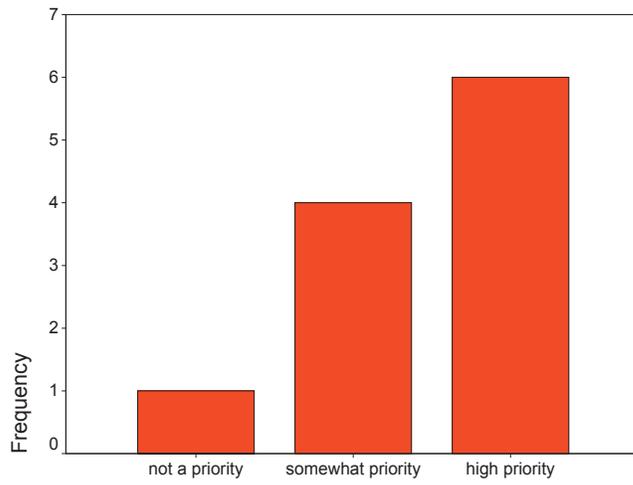
**Q12H Others**

		Frequency	Percent
Missing	System	13	100.0

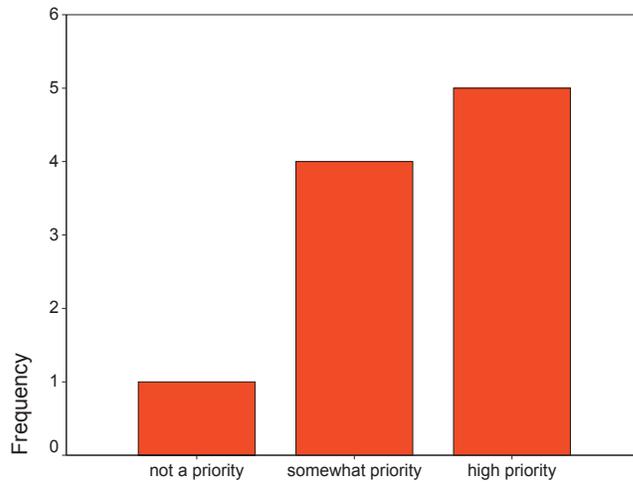
The research community



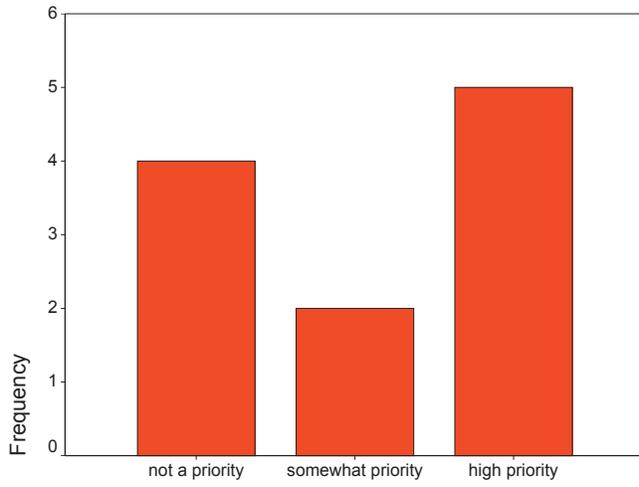
ODOT engineers



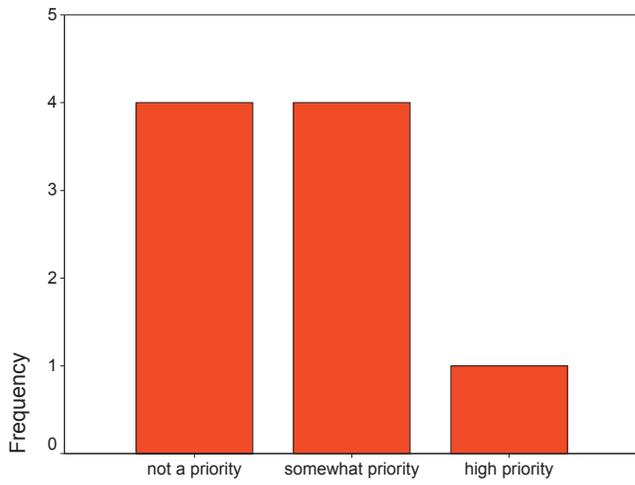
ODOT managers



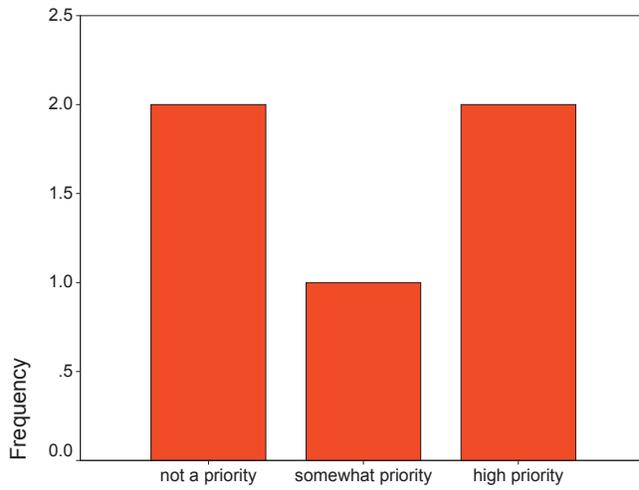
The traveling public



Other DOTs



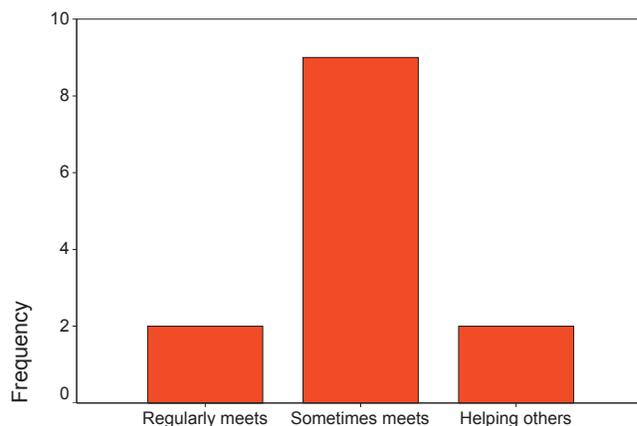
Particular unit(s) or division(s) within ODOT



**Q13: Which of the following statements best describes the extent to which your expectations are being met?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Research regularly meets my/my department's expectations	2	15.4	15.4	15.4
	2 Research sometimes meets my/my department's expectations	9	69.2	69.2	84.6
	3 The Research Program is helping other constituents but not mine	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Which best describes the extent to which your expectations are met?



**Q14. How do you learn of research program projects or activities?**

**Q14A Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	23.1	23.1
	2 no	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

**Q14B Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	15.4	15.4	15.4
	2 no	11	84.6	84.6	100.0
	Total	13	100.0	100.0	

**Q14C IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q14D Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	6	46.2	46.2	46.2
2 no	7	53.8	53.8	100.0
Total	13	100.0	100.0	

**Q14E Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	7.7	7.7	7.7
2 no	12	92.3	92.3	100.0
Total	13	100.0	100.0	

**Q14F Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	7.7	7.7	7.7
2 no	12	92.3	92.3	100.0
Total	13	100.0	100.0	

**Q14G Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	10	76.9	76.9	76.9
2 no	3	23.1	23.1	100.0
Total	13	100.0	100.0	

**Q14H Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	69.2	69.2	69.2
OTEC	1	7.7	7.7	76.9
OTEC, TRB	1	7.7	7.7	84.6
OTEC, TRB, ICOET ,others	1	7.7	7.7	92.3
TRB etc	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q14I Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	7.7	7.7	7.7
	2 no	12	92.3	92.3	100.0
	Total	13	100.0	100.0	

**Q14J Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	13	100.0	100.0	100.0

**Q14K Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	100.0	100.0	100.0

**Q14L Colleague**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	30.8	30.8	30.8
	2 no	9	69.2	69.2	100.0
	Total	13	100.0	100.0	

**Q14M Specify type**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		11	84.6	84.6	84.6
	FHWA, OD	1	7.7	7.7	92.3
	ODOT	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

**Q14N Researchers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	23.1	23.1
	2 no	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

**Q14O Specify type**

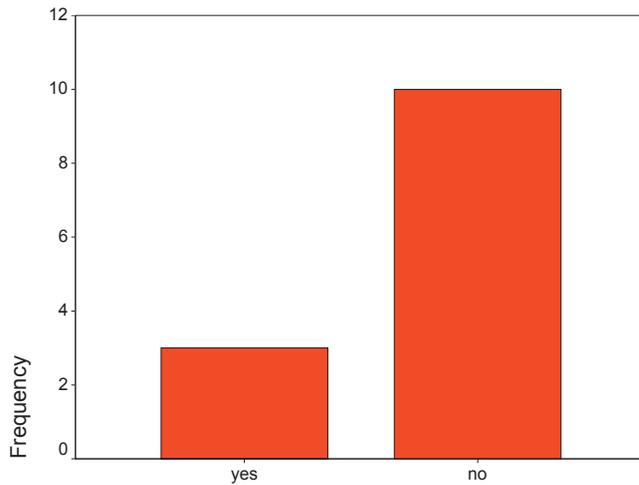
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	92.3	92.3	92.3
	TRB committee members	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

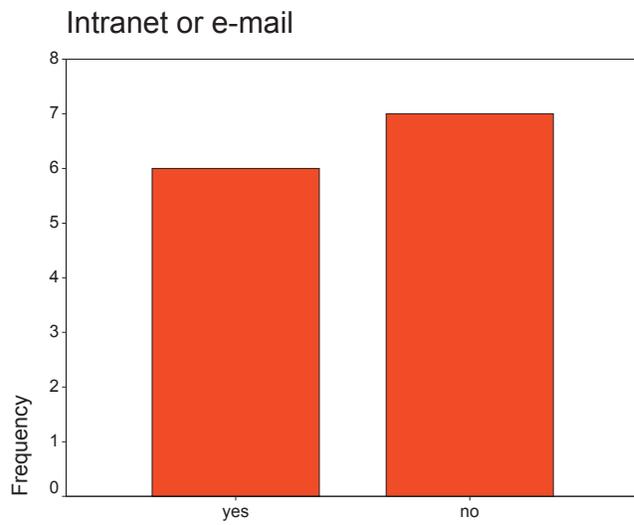
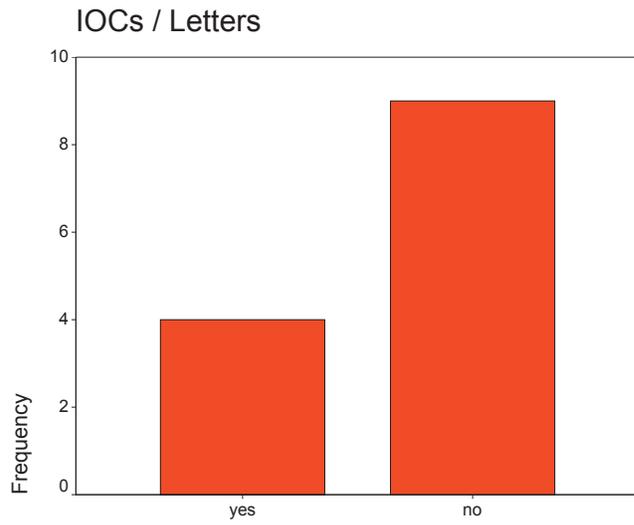
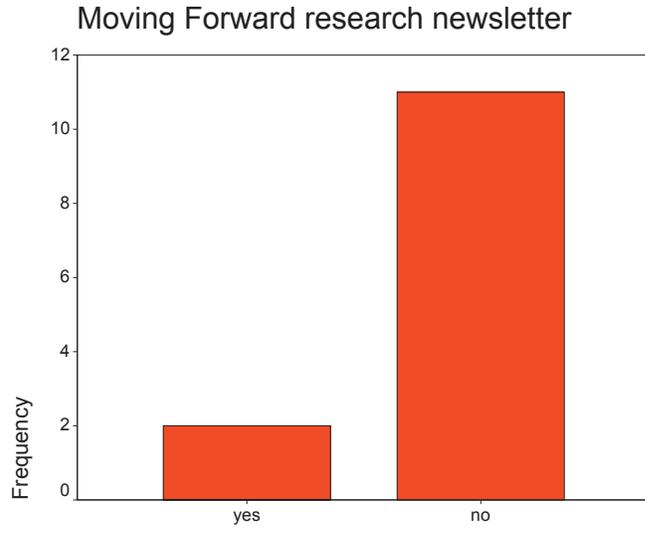
**Q14P Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	30.8	30.8	30.8
	2 no	9	69.2	69.2	100.0
	Total	13	100.0	100.0	

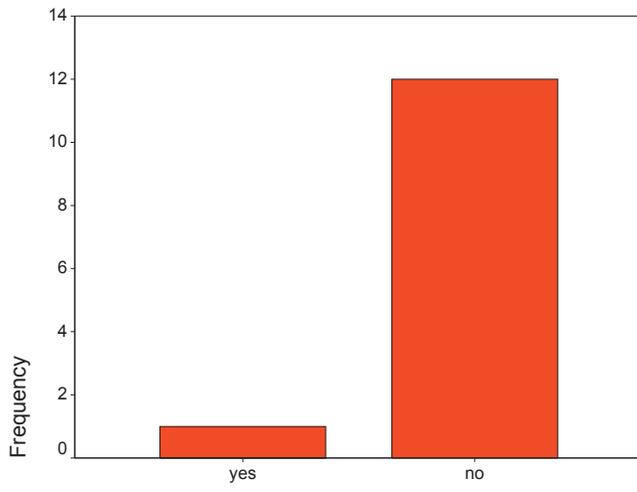
**Q14Q Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		9	69.2	69.2	69.2
	By being involved in the research project. I am not really interested in others publications	1	7.7	7.7	76.9
	reviewing projects for the Research office	1	7.7	7.7	84.6
	SPR&R program	1	7.7	7.7	92.3
	Total	13	100.0	100.0	100.0

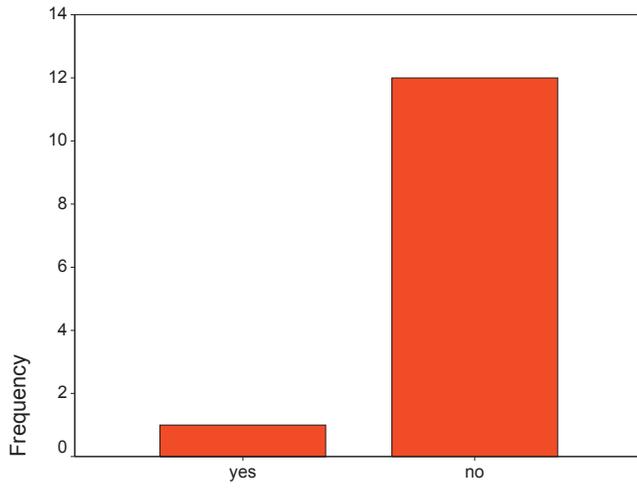
**Transcript newsletter**



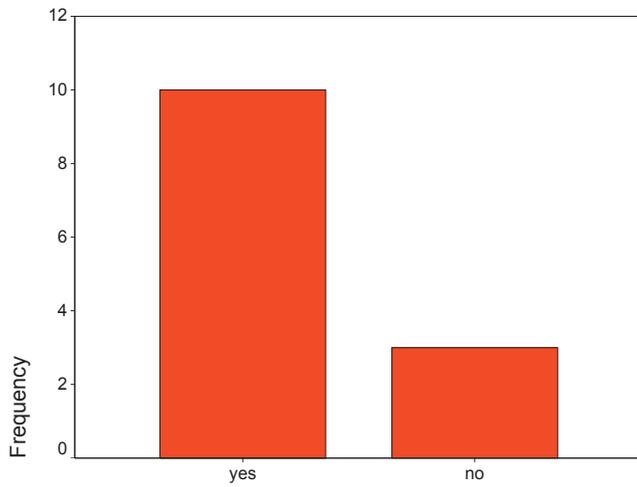
Internet or listservs



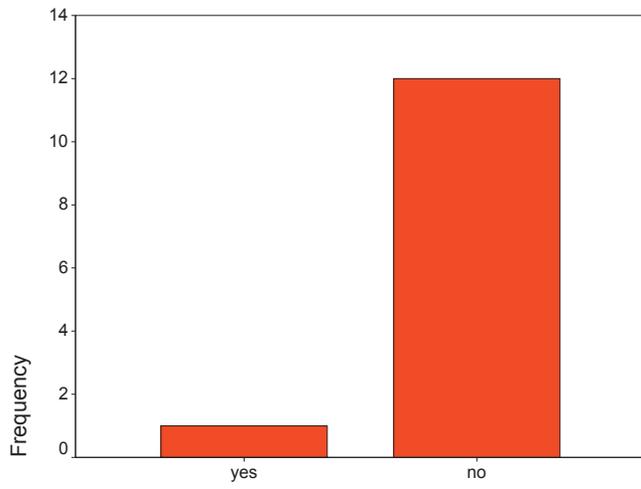
Web page



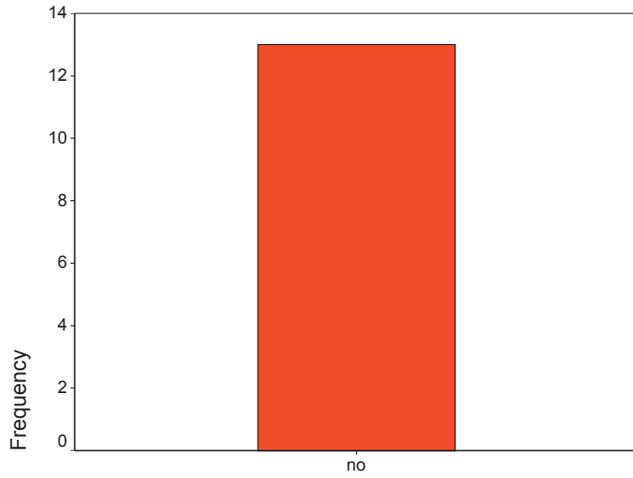
Conferences such as OTEC



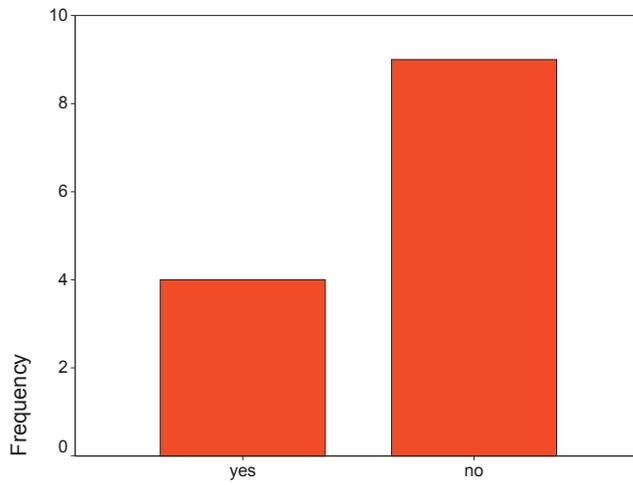
Brochures

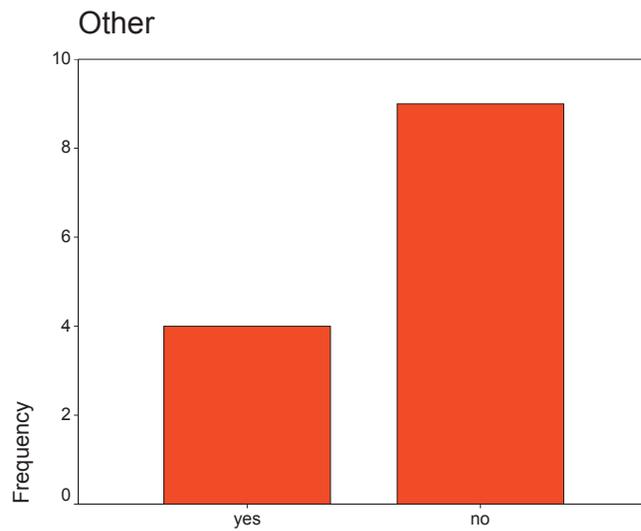
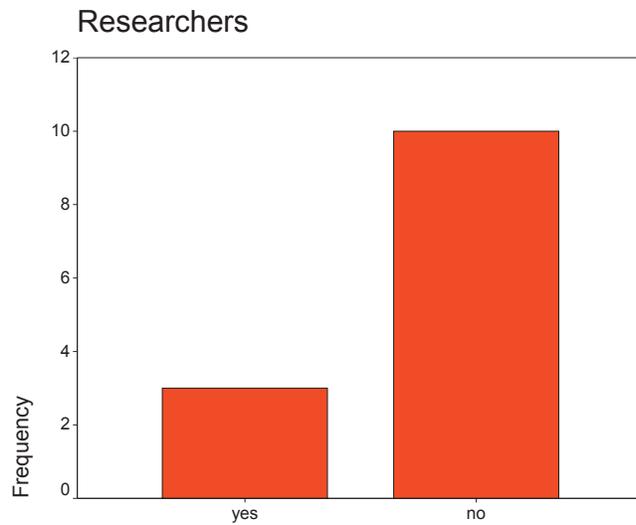


Media (newspaper, TV, radio)



Colleague

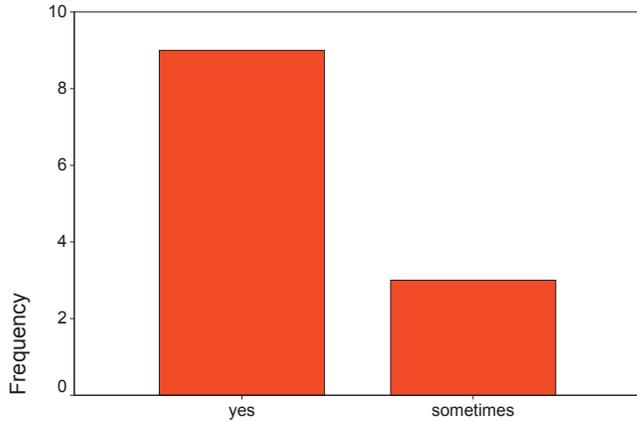




**Q15: Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	9	69.2	75.0	75.0
	3 sometimes	3	23.1	25.0	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

Do you find the Research Office to be accessible (i.e., easy to contact)?



**Q16: Are you aware of any research program activities that resulted in the following:**

**Q16A Personnel cost saving**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	13	100.0	100.0	100.0

**Q16A1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13	100.0	100.0	100.0

**Q16B Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	38.5	38.5	38.5
2 no	8	61.5	61.5	100.0
Total	13	100.0	100.0	

**Q16B1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	69.2	69.2	69.2
construction costs	1	7.7	7.7	76.9
drilled shaft lateral load, others	1	7.7	7.7	84.6
materials	1	7.7	7.7	92.3
SN for asphalt concrete will save money when implimented	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q16C Safety improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	7.7	7.7	7.7
2 no	12	92.3	92.3	100.0
Total	13	100.0	100.0	

**Q16D Quality improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	6	46.2	46.2	46.2
2 no	7	53.8	53.8	100.0
Total	13	100.0	100.0	

**Q16D1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	61.5	61.5	61.5
asphalt	1	7.7	7.7	69.2
Development of QC/QA specifications for PCC	1	7.7	7.7	76.9
materials durability	1	7.7	7.7	84.6
Materials studies galore	1	7.7	7.7	92.3
Provided impact analysis	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q16E Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	38.5	38.5	38.5
2 no	8	61.5	61.5	100.0
Total	13	100.0	100.0	

**Q16E1 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	61.5	61.5	61.5
asphalt	1	7.7	7.7	69.2
BMPs for stormwater management.	1	7.7	7.7	76.9
Improved mix design	1	7.7	7.7	84.6
ongoing	1	7.7	7.7	92.3
polymer binders	1	7.7	7.7	100.0
Total	13	100.0	100.0	

**Q16F Better methods**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	38.5	38.5	38.5
	2 no	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

**Q16F1 Specify**

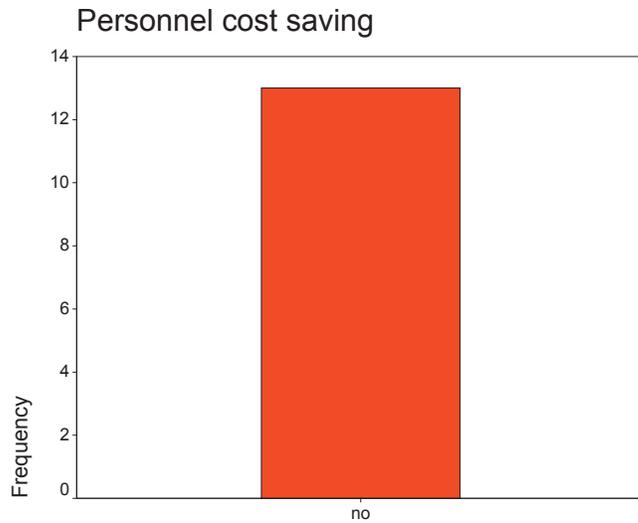
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		8	61.5	61.5	61.5
	asphalt	1	7.7	7.7	69.2
	BMPs for stormwater management	1	7.7	7.7	76.9
	Improved design procedures	1	7.7	7.7	84.6
	ongoing	1	7.7	7.7	92.3
	several projects which researched applications of geophysics to acquire	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

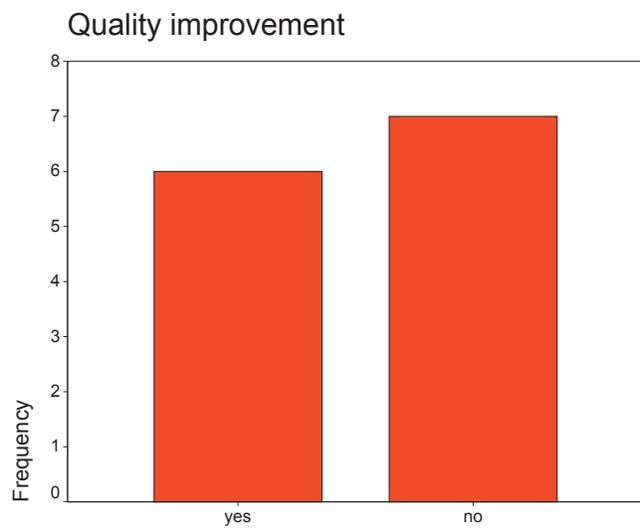
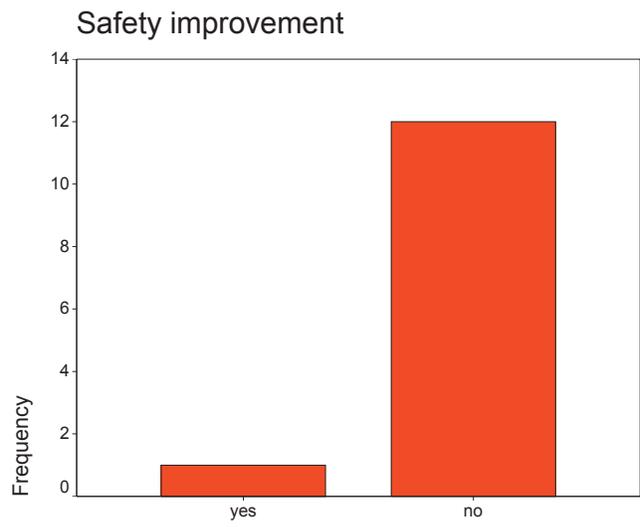
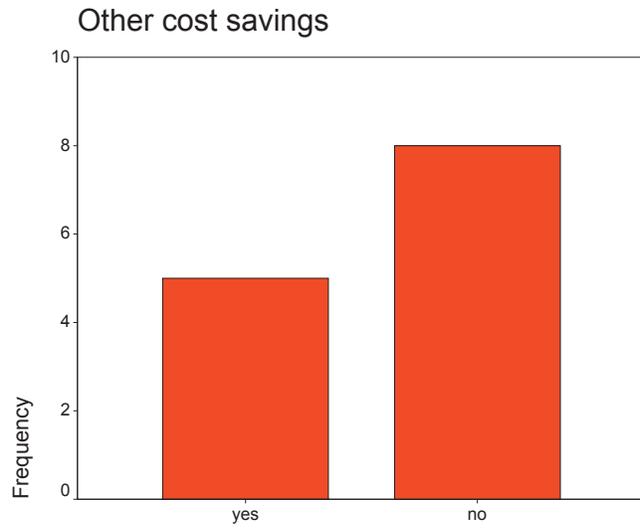
**Q16G Other**

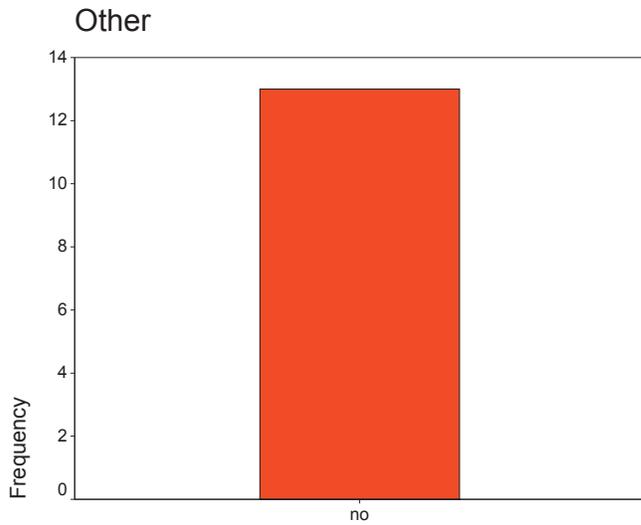
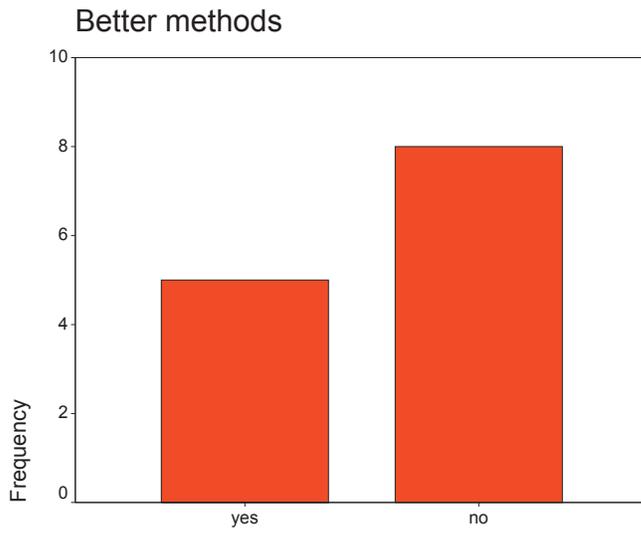
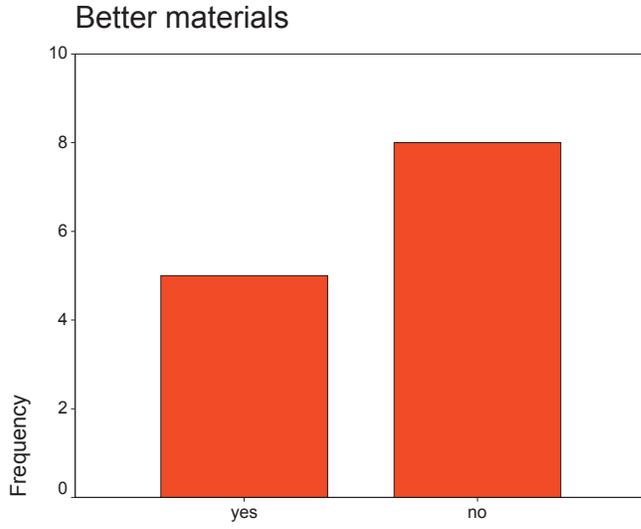
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	13	100.0	100.0	100.0

**Q16G1 Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	100.0	100.0	100.0







**Q17: Have you heard of any of the following specific research projects?****Q17A SHRP pavement project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	13	100.0	100.0	100.0

**Q17B Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	38.5	38.5	38.5
2 no	8	61.5	61.5	100.0
Total	13	100.0	100.0	

**Q17C Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q17D Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	7	53.8	53.8	53.8
2 no	6	46.2	46.2	100.0
Total	13	100.0	100.0	

**Q17E Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	13	100.0	100.0	100.0

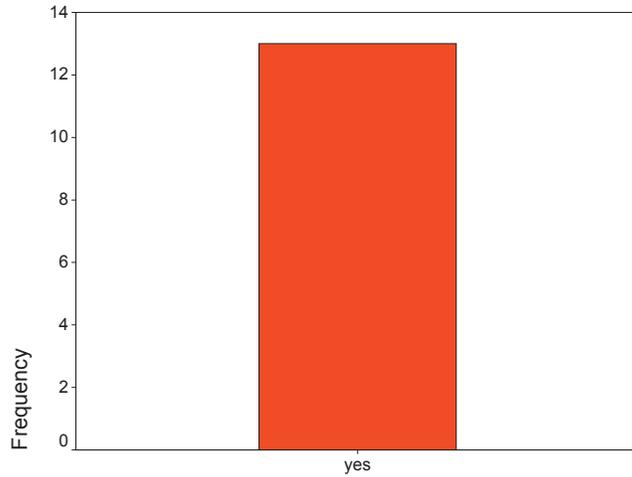
**Q17F Innovative Bridge Design Construction Techniques to Expedite Construction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	23.1	23.1	23.1
2 no	10	76.9	76.9	100.0
Total	13	100.0	100.0	

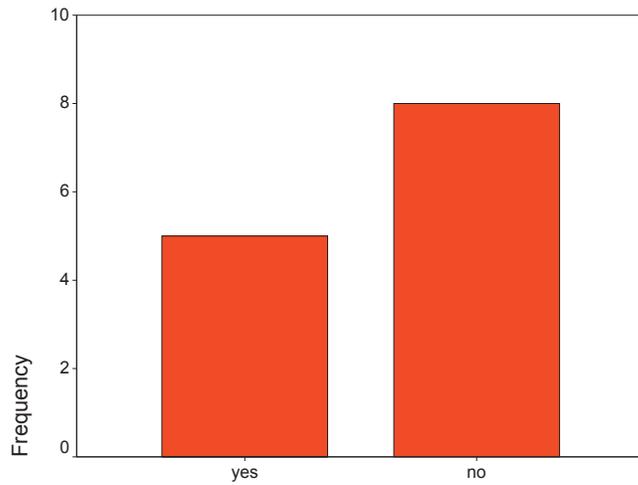
**Q17G Comparison and Definition of State DOT? Practices in Selection of**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	30.8	30.8	30.8
	2 no	9	69.2	69.2	100.0
	Total	13	100.0	100.0	

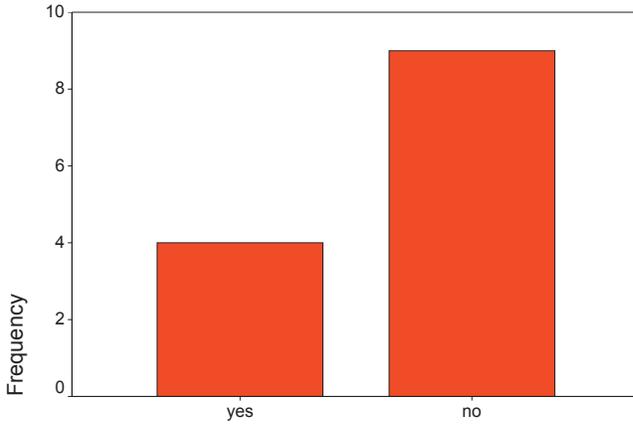
SHRP pavement project on Delaware 23



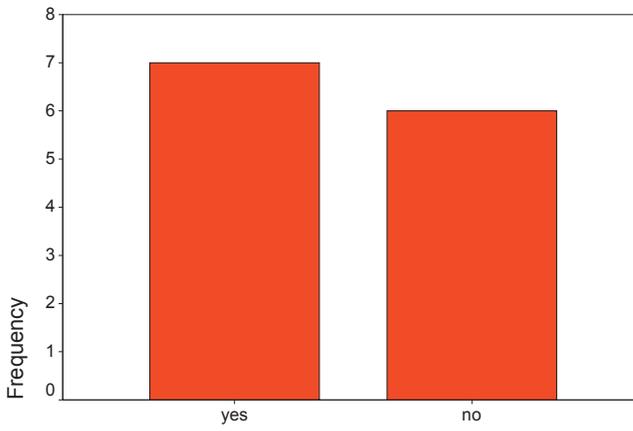
Ohio Freight Study



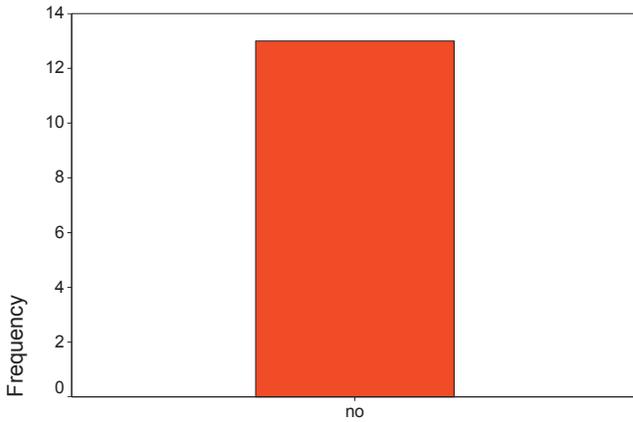
### Evaluation of Warranty Provisions on ODOT Construction Projects



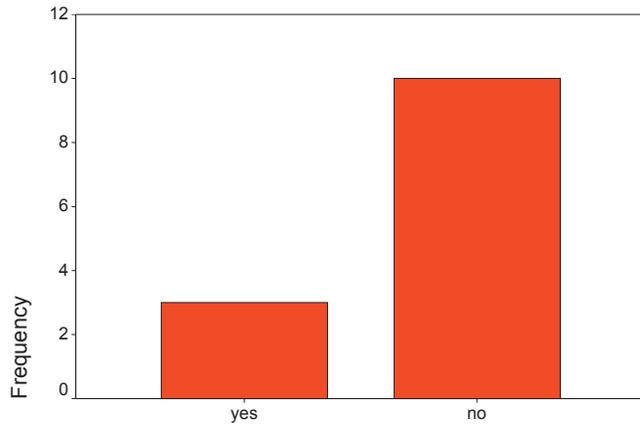
### Evaluation of Drainable Bases Under Asphalt Pavement



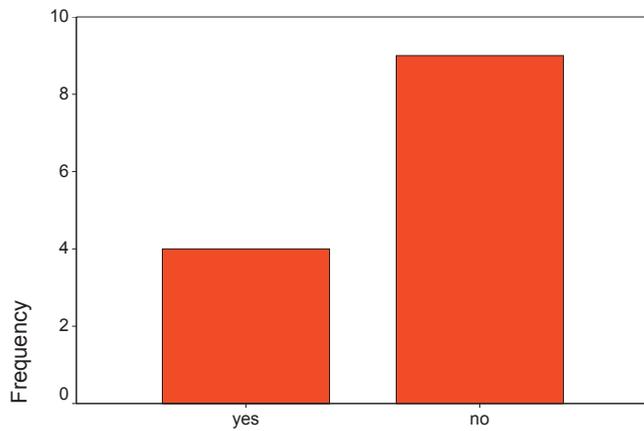
### Development of Crash Reduction Techniques



Innovative Bridge Design Construction  
Techniques to Expedite Construction



Comparison and Definition of State DOT's  
Practices in Selection of Pavement



**Q17A: How did you hear of them?**

**Q17A1 Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q17A2 Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	7.7	7.7	7.7
2 no	12	92.3	92.3	100.0
Total	13	100.0	100.0	

**Q17A3 Memoranda / Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	15.4	15.4	15.4
	2 no	11	84.6	84.6	100.0
	Total	13	100.0	100.0	

**Q17A4 Intranet or e-mail**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	38.5	38.5	38.5
	2 no	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

**Q17A5 Internet or listservs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	13	100.0	100.0	100.0

**Q17A6 Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	7.7	7.7	7.7
	2 no	12	92.3	92.3	100.0
	Total	13	100.0	100.0	

**Q17A7 Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	7.7	7.7	7.7
	2 no	12	92.3	92.3	100.0
	Total	13	100.0	100.0	

**Q17A8 Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	92.3	92.3	92.3
	O TEC	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

**Q17A9 Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	13	100.0	100.0	100.0

**Q17A10 Media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	13	100.0	100.0	100.0

**Q17A11 Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	6	46.2	46.2	46.2
2 no	7	53.8	53.8	100.0
Total	13	100.0	100.0	

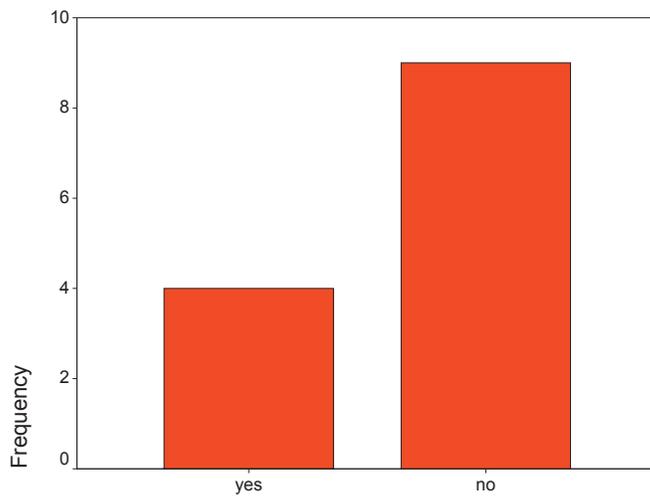
**Q17A12 Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	38.5	38.5	38.5
2 no	8	61.5	61.5	100.0
Total	13	100.0	100.0	

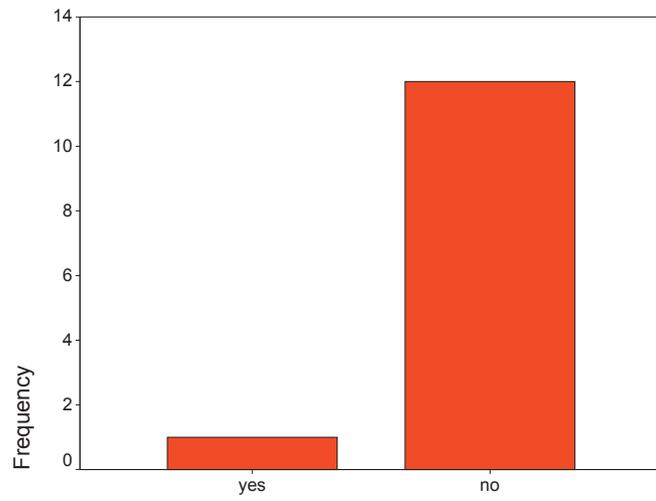
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	61.5	61.5	61.5
ODOT contacts	1	7.7	7.7	69.2
personal involvement	3	23.1	23.1	92.3
word of mouth	1	7.7	7.7	100.0
Total	13	100.0	100.0	

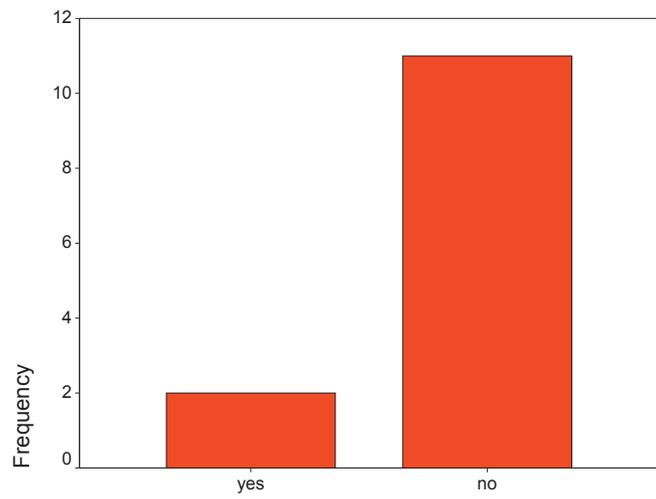
Transcript newsletter



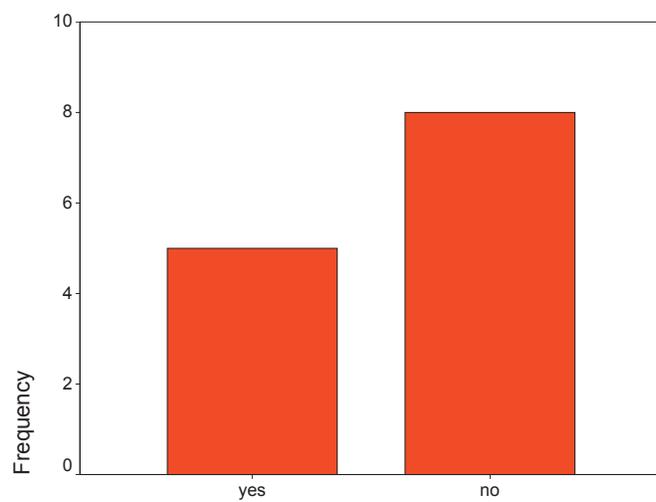
Moving Forward research newsletter

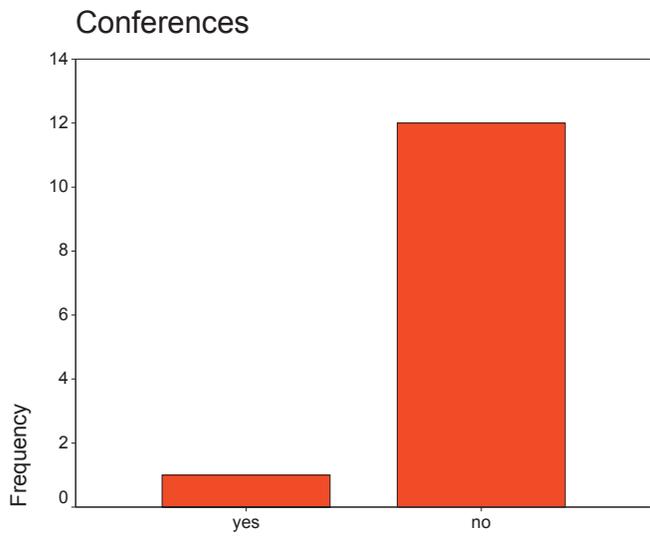
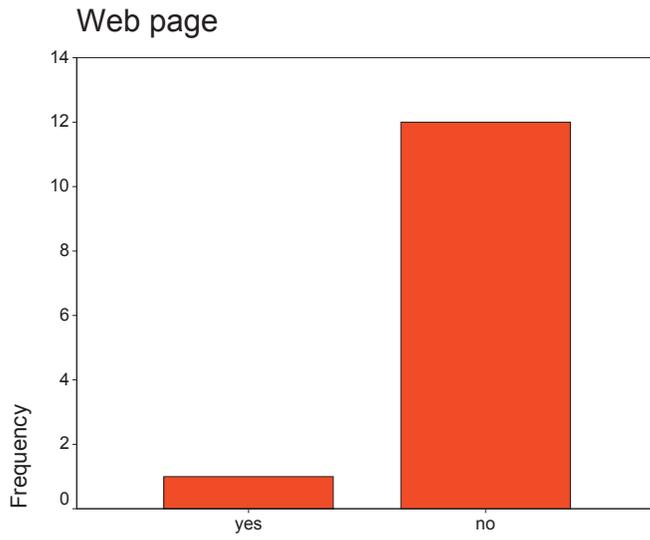
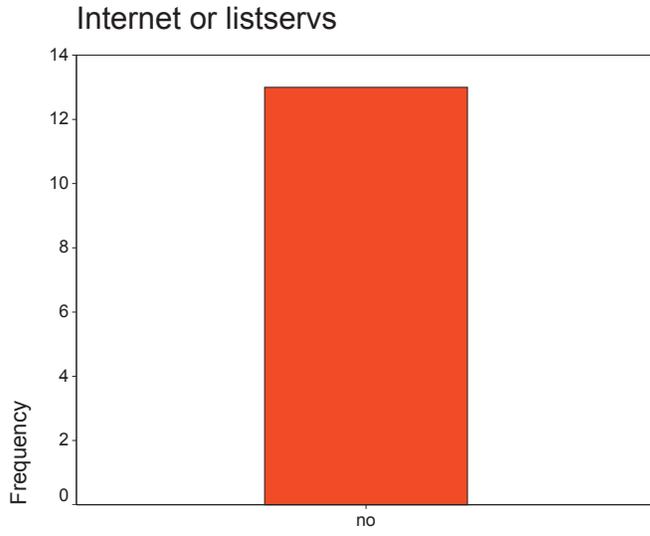


Memoranda / Letters

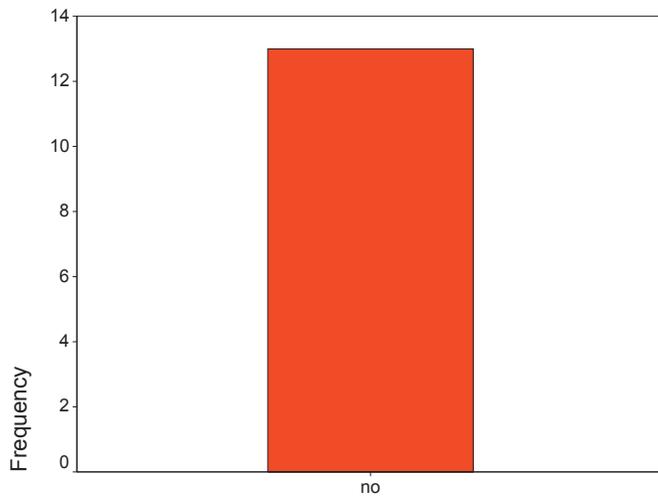


Intranet or e-mail

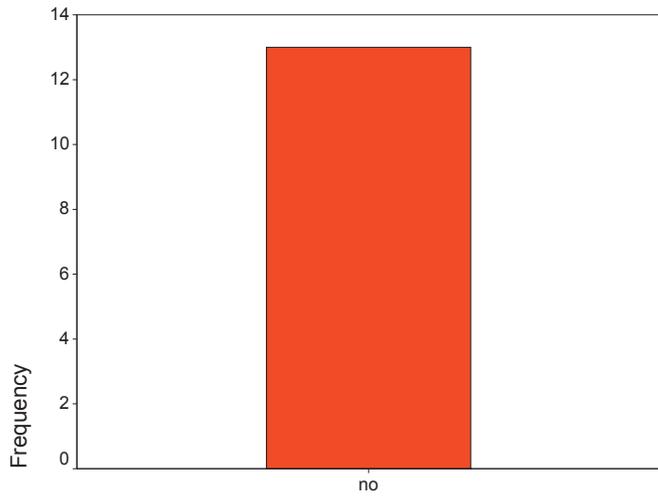




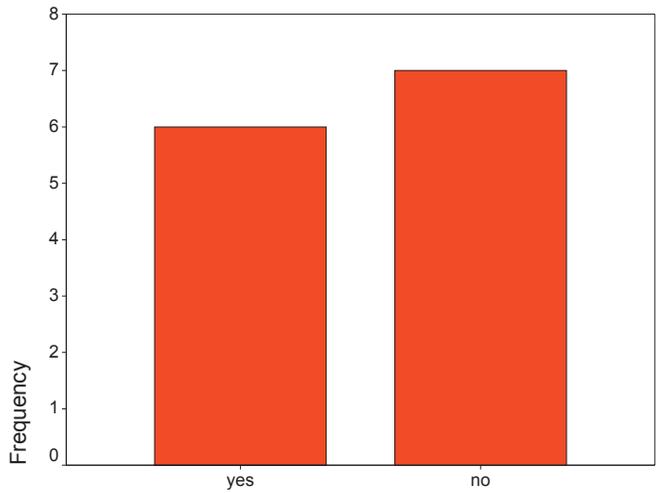
Brochures



Media



Colleagues



**Q18A Inadequate staffing**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q18B Inadequate funding**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	23.1	23.1	23.1
2 no	10	76.9	76.9	100.0
Total	13	100.0	100.0	

**Q18C Inadequate support from sponsors**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	15.4	15.4	15.4
2 no	11	84.6	84.6	100.0
Total	13	100.0	100.0	

**Q18D Risk of no payoff**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	30.8	30.8	30.8
2 no	9	69.2	69.2	100.0
Total	13	100.0	100.0	

**Q18E Political considerations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	7.7	7.7	7.7
2 no	12	92.3	92.3	100.0
Total	13	100.0	100.0	

**Q18F No significant limitations**

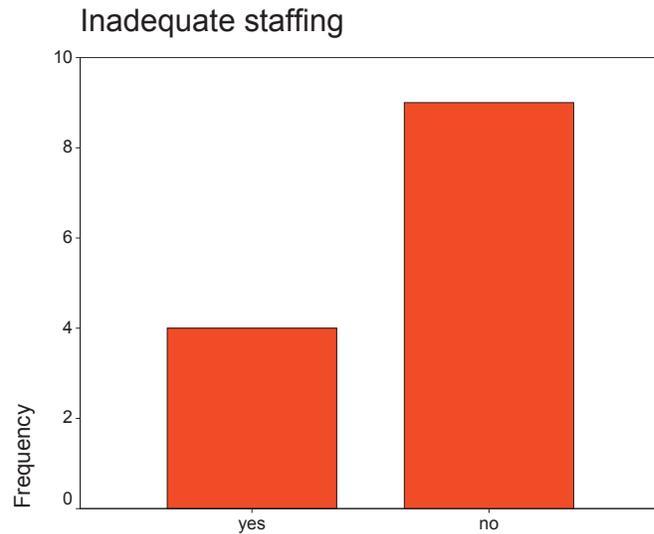
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	15.4	15.4	15.4
2 no	11	84.6	84.6	100.0
Total	13	100.0	100.0	

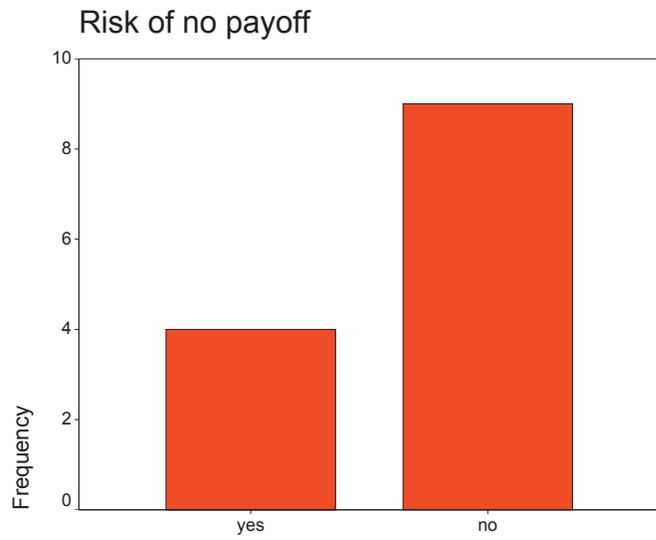
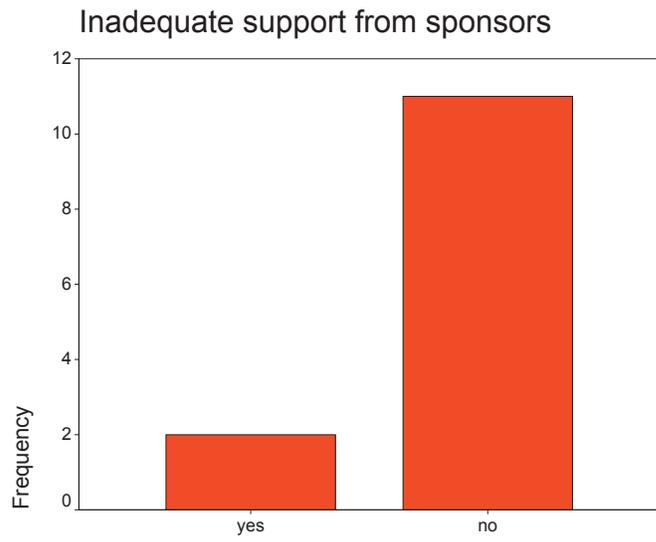
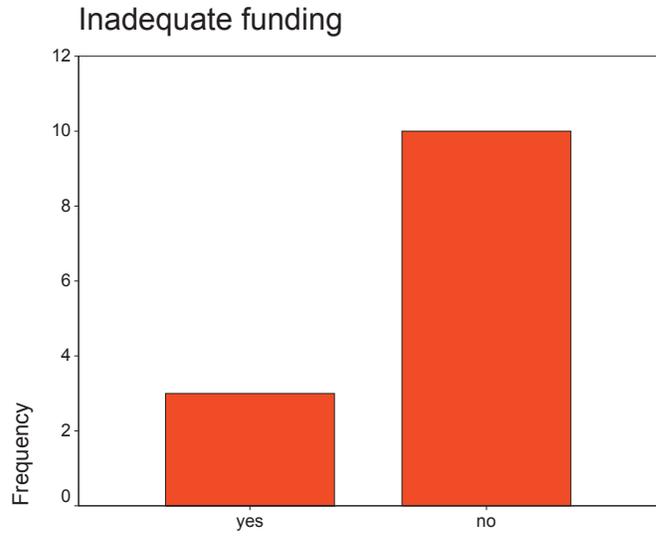
**Q18G Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	15.4	15.4	15.4
2 no	11	84.6	84.6	100.0
Total	13	100.0	100.0	

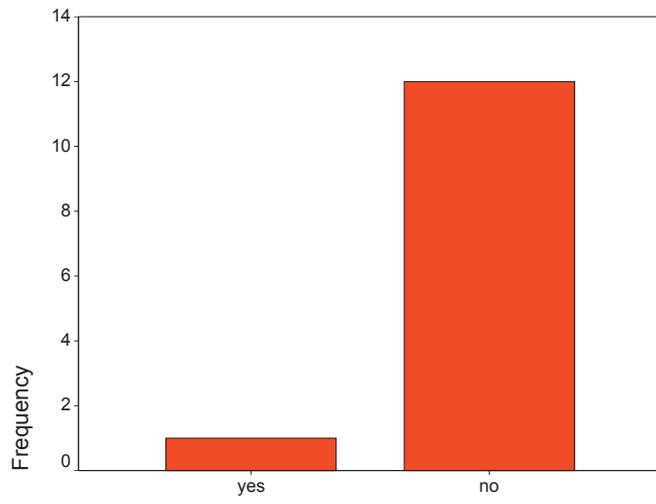
**Q18H Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	76.9	76.9	76.9
contacting limitations	1	7.7	7.7	84.6
It is very difficult for project sponsors to have the necessary level of involvement and do their other jobs at ODOT. In the past people in many offices carried research as a portion of their duties and were afforded at least some of their time to either	1	7.7	7.7	92.3
no experience, nobody in the research office has every conducted and reported research	1	7.7	7.7	100.0
Total	13	100.0	100.0	

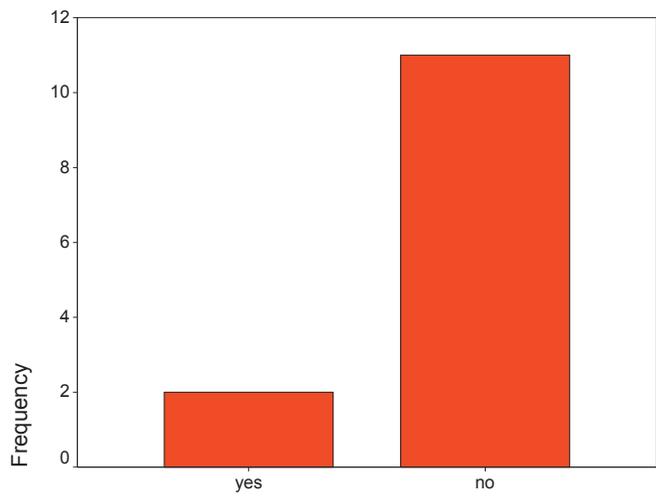




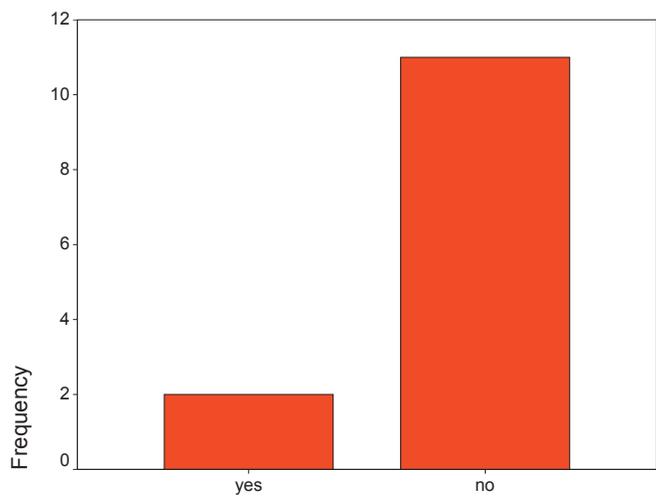
Political considerations



No significant limitations



Other



**Q19: What is your preferred source of information about the research program? That is, how could the Research Office best keep in touch with you?**

**Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	15.4	15.4	15.4
	2 no	11	84.6	84.6	100.0
	Total	13	100.0	100.0	

**Q19B Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	15.4	15.4	15.4
	2 no	11	84.6	84.6	100.0
	Total	13	100.0	100.0	

**Q19C IOCs / Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	23.1	23.1
	2 no	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

**Q19D Intranet or e-mail**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	8	61.5	61.5	61.5
	2 no	5	38.5	38.5	100.0
	Total	13	100.0	100.0	

**Q19E Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	38.5	38.5	38.5
	2 no	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

**Q19F Conferences such as OTEC**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	30.8	30.8	30.8
	2 no	9	69.2	69.2	100.0
	Total	13	100.0	100.0	

**Q19G Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	84.6	84.6	84.6
OTEC	2	15.5	100.0	100.0
Total	13	100.0	100.0	

**Q19H Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	13	100.0	100.0	100.0

**Q19I Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	13	100.0	100.0	100.0

**Q19J Colleagues**

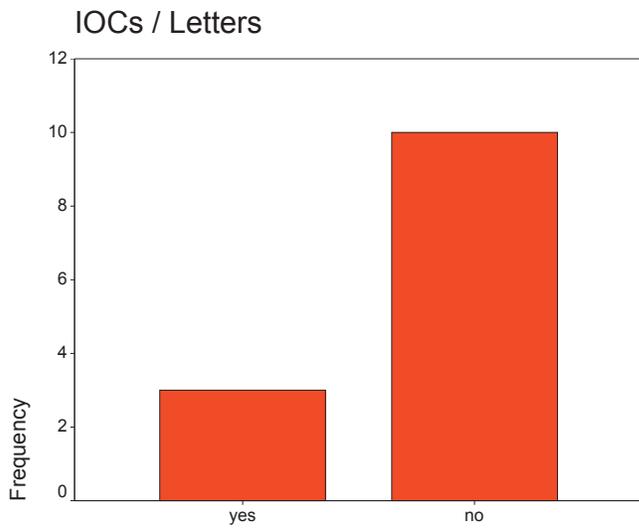
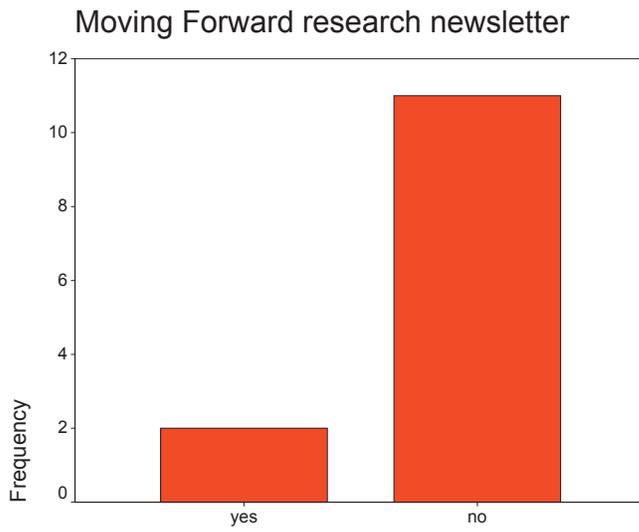
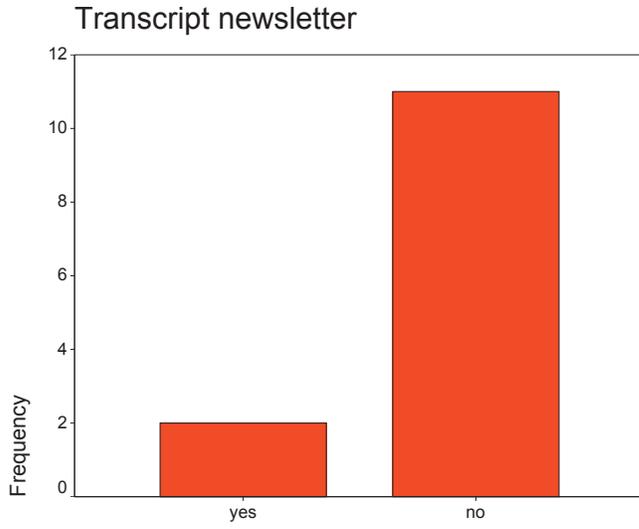
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	23.1	23.1	23.1
2 no	10	76.9	76.9	100.0
Total	13	100.0	100.0	

**Q19K Other**

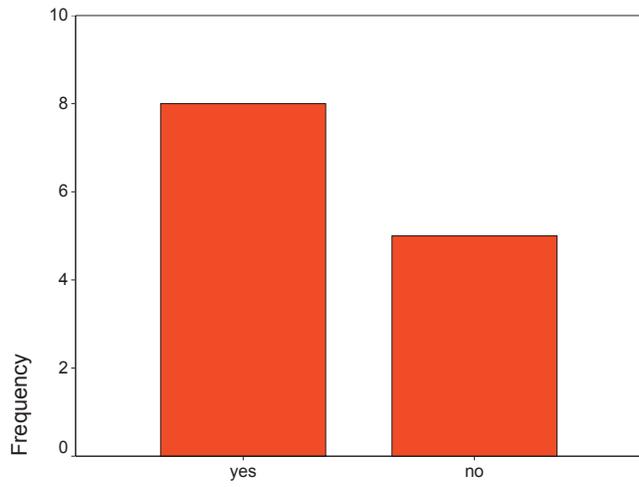
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	23.1	23.1	23.1
2 no	10	76.9	76.9	100.0
Total	13	100.0	100.0	

**Q19L Specify**

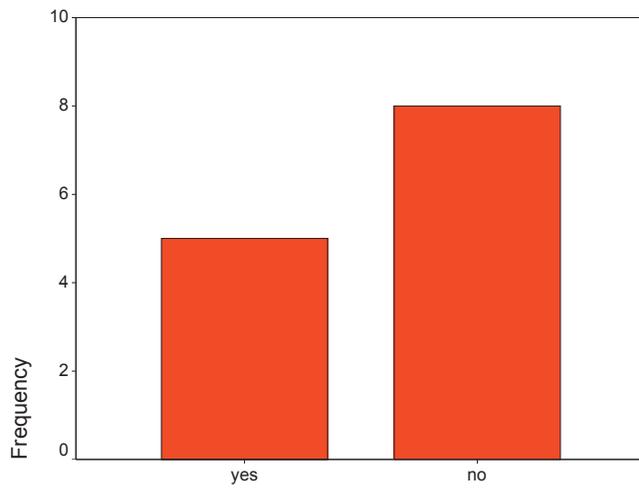
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	84.6	84.6	84.6
keep the office involved	1	7.7	7.7	92.3
Provide internal forums on relevant research results for staff involved in the appropriate programs.	1	7.7	7.7	100.0
Total	13	100.0	100.0	



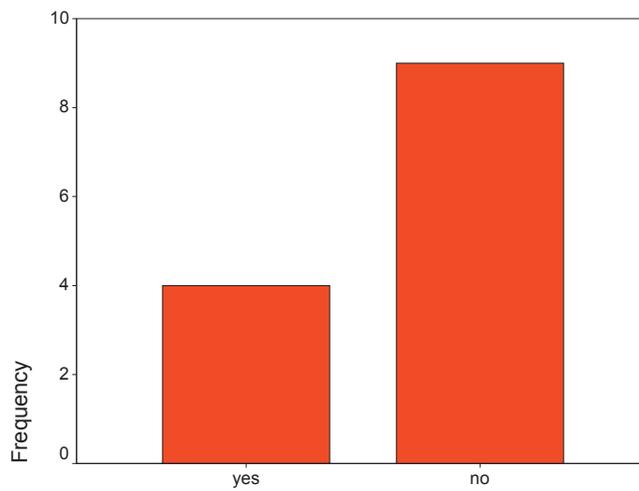
Intranet or e-mail

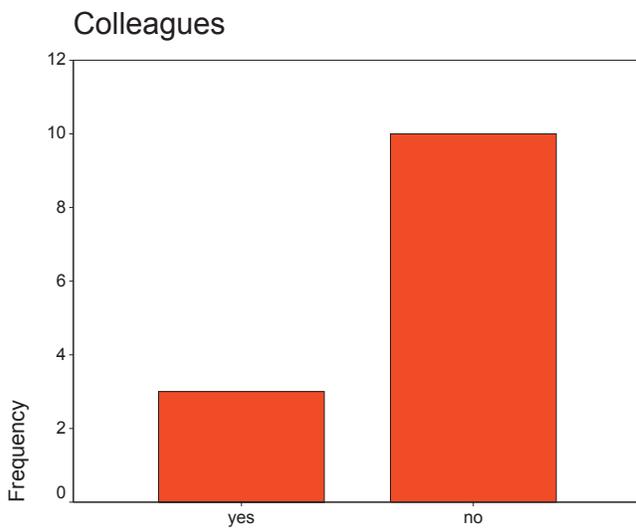
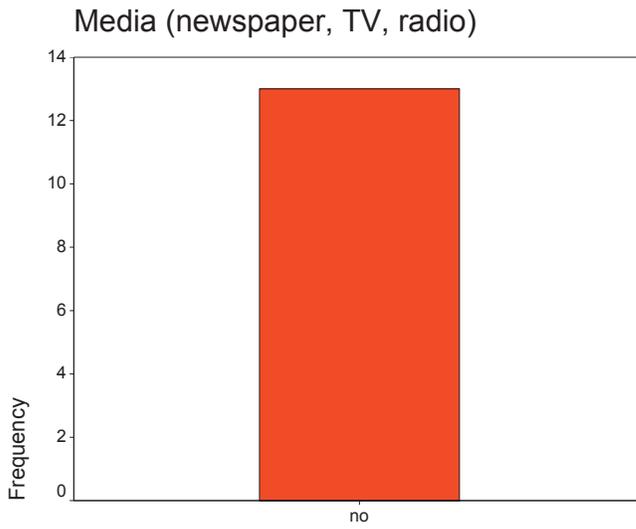
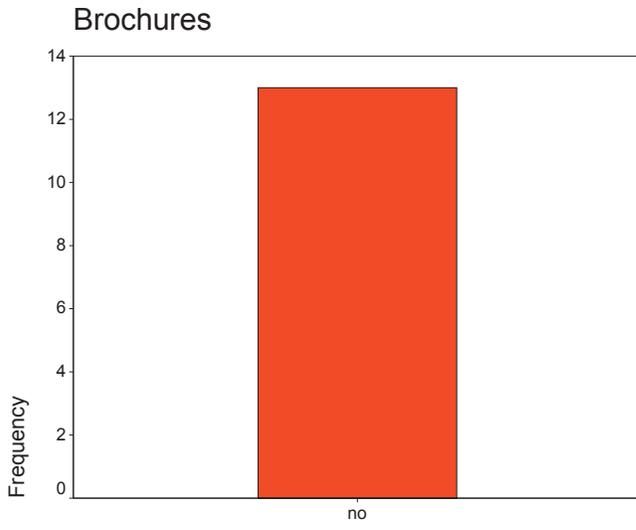


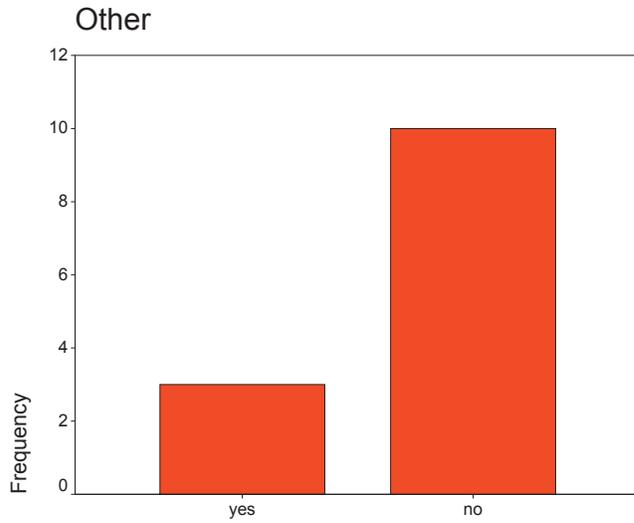
Web page



Conferences such as OTEC



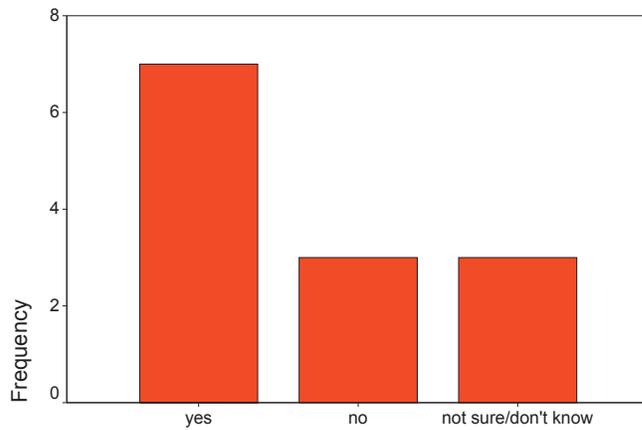




**Q20: Do you feel that you are part of the research program's strategic planning process?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	7	53.8	53.8	53.8
2 no	3	23.1	23.1	76.9
3 not sure/don't know	3	23.1	23.1	100.0
Total	13	100.0	100.0	

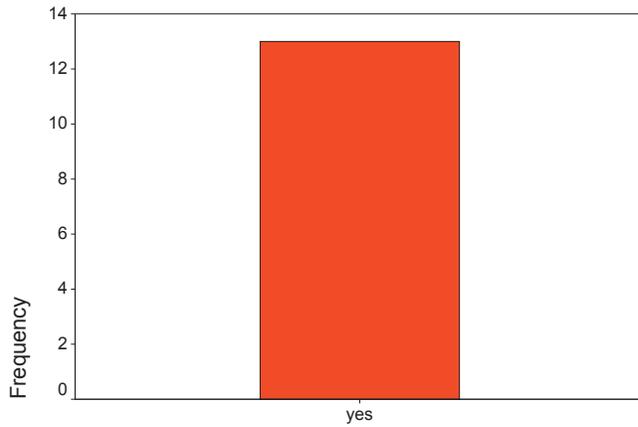
Do you feel that you are part of the research program's strategic planning?



**Q21: Do you feel that you have input into the research program at the project level?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	13	100.0	100.0	100.0

Do you have input into the research program at the project level?



**Q22: What types of research activities are you most interested in knowing about? (Please check all that apply)**

**Q22A Requests for Proposals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	30.8	33.3	33.3
	2 no	8	61.5	66.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22B Ohio success stories**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	25.0	25.0
	2 no	9	69.2	75.0	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22C Best practices (local, national, etc.)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	8	61.5	66.7	66.7
	2 no	4	30.8	33.3	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22D Technical innovations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	9	69.2	75.0	75.0
	2 no	3	23.1	25.0	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22E Technology transfer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	7	53.8	58.3	58.3
	2 no	5	38.5	41.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22F Research management process**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	23.1	25.0	25.0
	2 no	9	69.2	75.0	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

**Q22G Strategic research plan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	6	46.2	50.0	50.0
	2 no	6	46.2	50.0	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

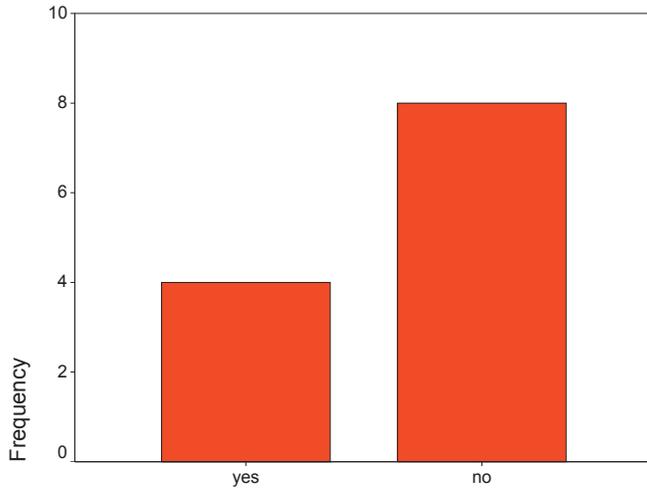
**Q22H Training opportunities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	7.7	8.3	8.3
	2 no	11	84.6	91.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

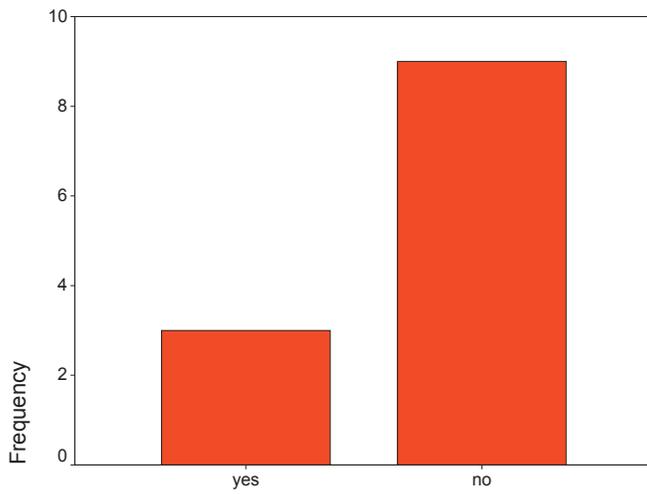
**Q22I Implementation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	7	53.8	58.3	58.3
	2 no	5	38.5	41.7	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

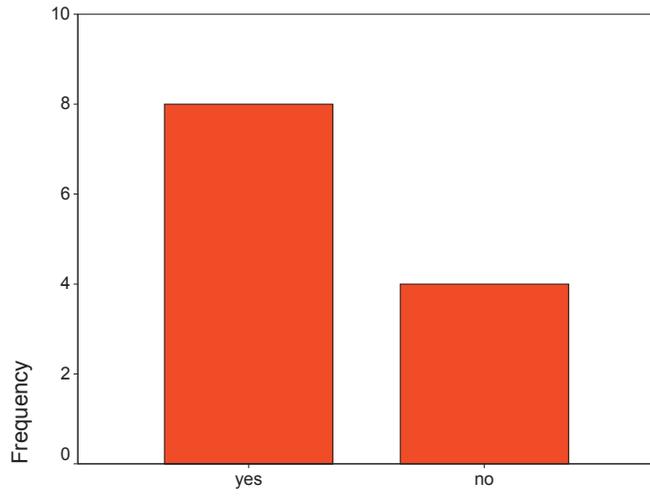
Requests for Proposals



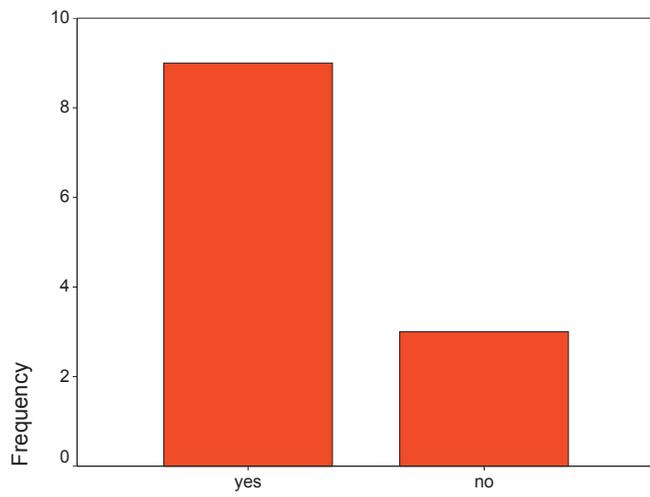
Ohio's success stories



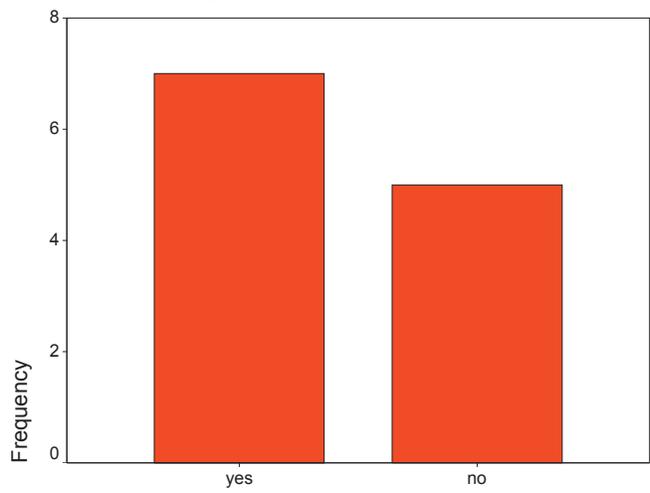
Best practices (local, national, etc.)

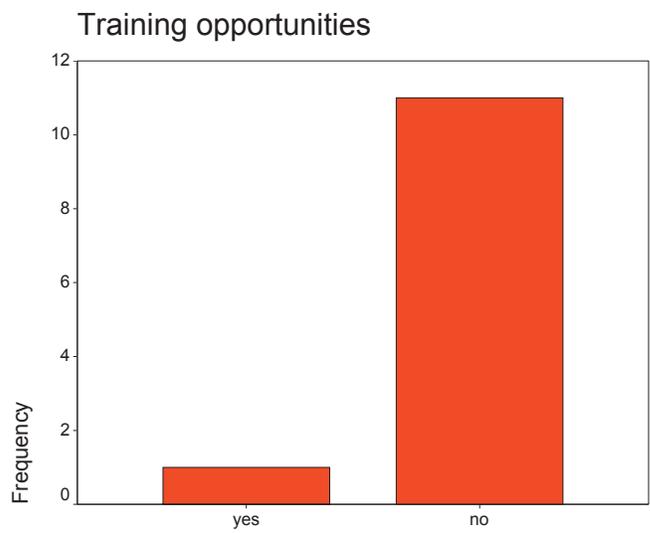
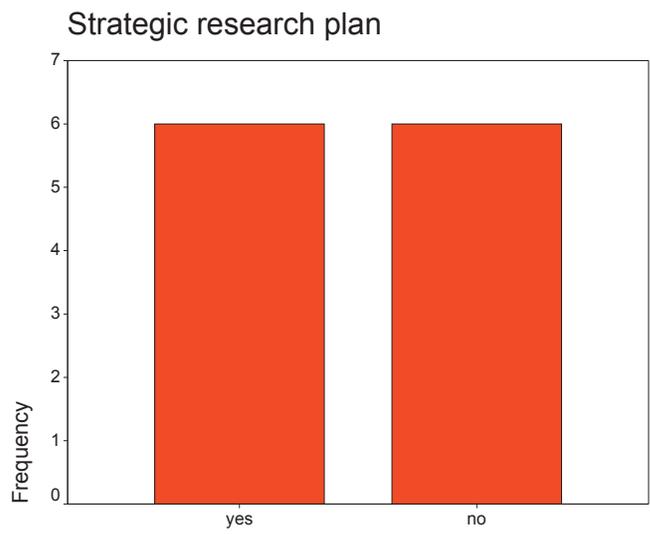
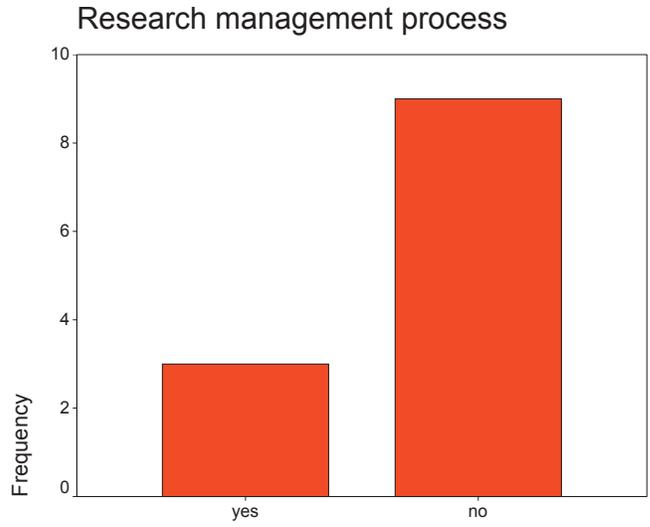


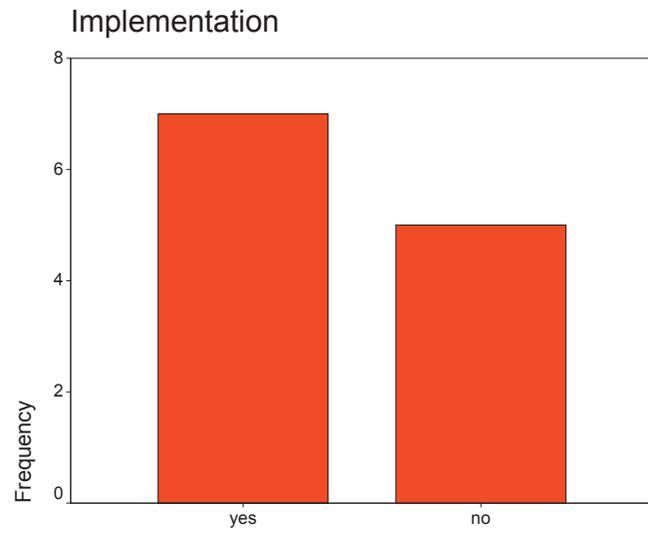
Technical innovations



Technology transfer







**Q23: Finally, please take a moment to consider---and then list---any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	53.8	53.8	53.8
Office of Structural Engineering, Office of Maintenance Management	1	7.7	7.7	61.5
ODOT consultants	1	7.7	7.7	69.2
ODOT Construction, Districts, Soil Consultants	1	7.7	7.7	76.9
Staff members of the Office of Roadway Engineering. Other states DOT's design or standards offices	1	7.7	7.7	84.6
Trade Organizations - members sometimes serve on project panels				
Consultants FHWA - Washington DC				
Academia other DOTs	1	7.7	7.7	92.3
The public - have given presentations to several groups and have found they are very interested in what's happening in the research area, Why do we need to come up with customers? If it is needed research, ODOT is the obvious customer. If ODOT doesn't need it, then why do it? Others can use our research results. They are public record.	1	7.7	7.7	100.0
Total	13	100.0	100.0	

## Appendix D District Deputy Directors Survey Results

**Q1: What is your working title?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid district deputy director	5	100.0	100.0	100.0

**Q2: What is your work classification?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
DD 6	3	60.0	60.0	100.0
Total	5	100.0	100.0	

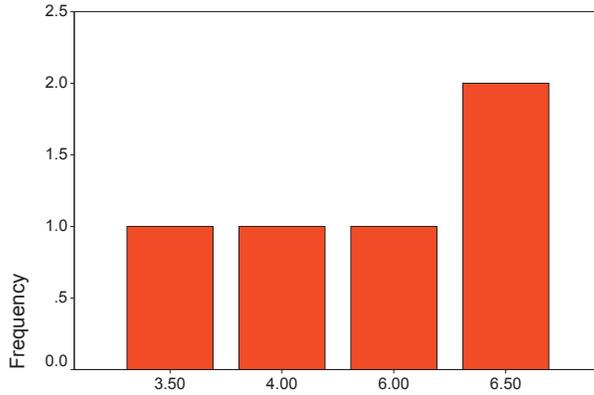
**Q3: In what division/office are you employed?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20.0	20.0	20.0
Administration Dist. 5	1	20.0	20.0	40.0
District 11	1	20.0	20.0	60.0
District 12	1	20.0	20.0	80.0
District 8	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Q4: How many years have you been employed in your current position?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.50	1	20.0	20.0	20.0
4.00	1	20.0	20.0	40.0
6.00	1	20.0	20.0	60.0
6.50	2	40.0	40.0	100.0
Total	5	100.0	100.0	

How many years have you been employed  
in your current position?



**Q5A. To what degree would you say you are involved in the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat involved	2	40.0	40.0	40.0
not very involved	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Q5B. In what way are you involved?**

**Project monitor**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Supplied research needs/project ideas**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Implementation of a product of the research program**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Reviewed research proposals being considered for funding**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Reviewed final reports**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

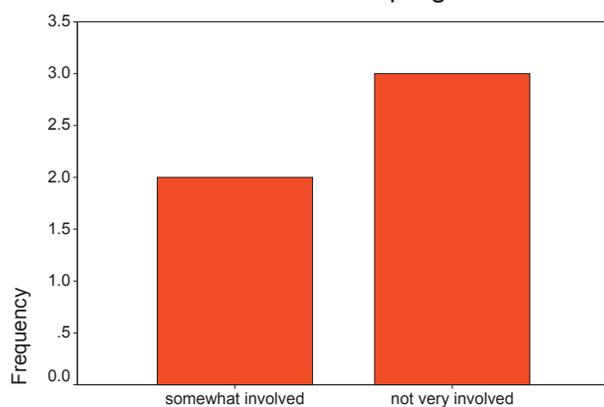
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
sometimes suggest projects	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**What is the main reason for your lack of involvement?**

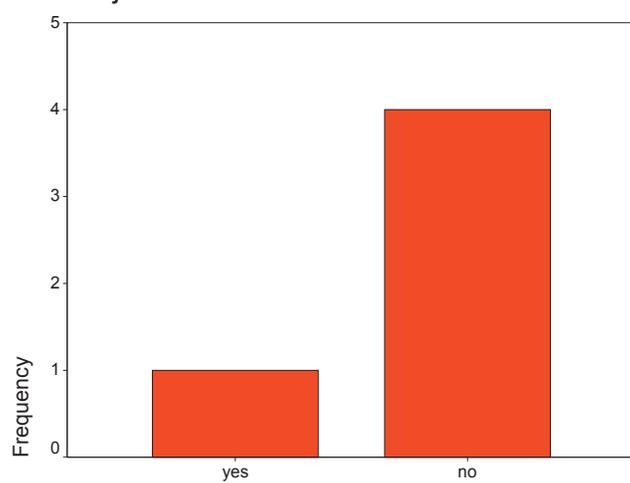
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
can't get very involved in my position	1	20.0	20.0	100.0
Total	5	100.0	100.0	

To what degree would you say you are involved in the research program?

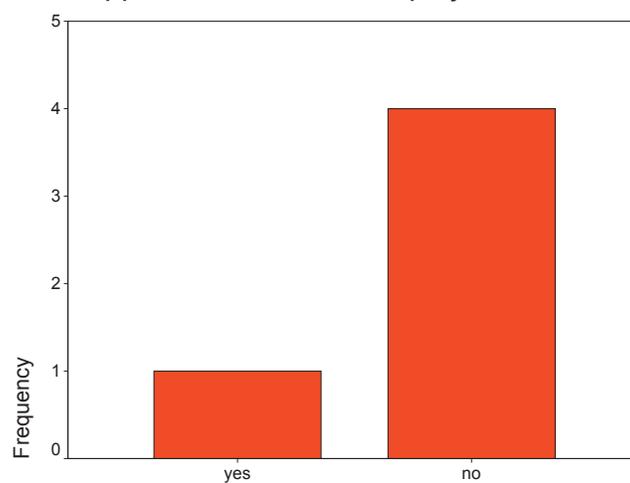


In what way are you involved?

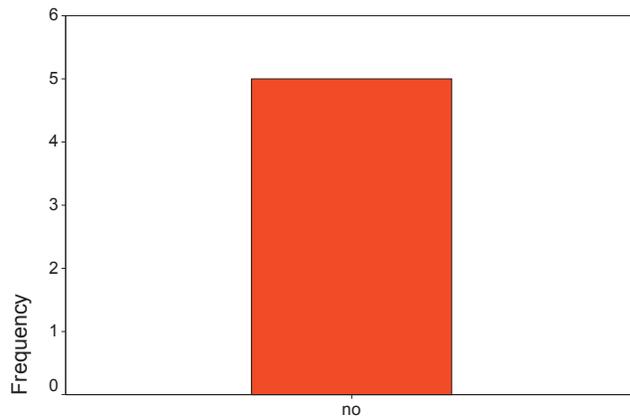
Project monitor



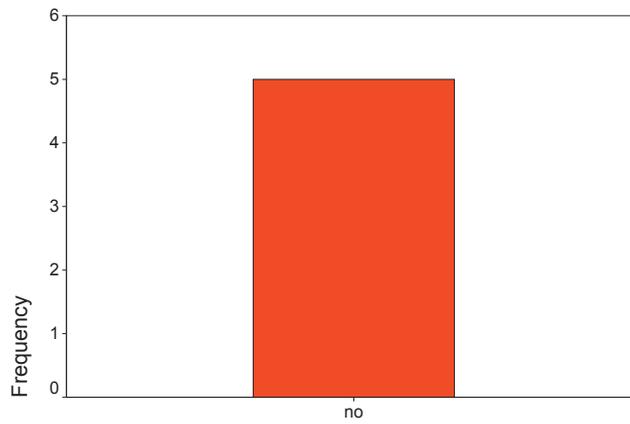
Supplied research needs/project ideas



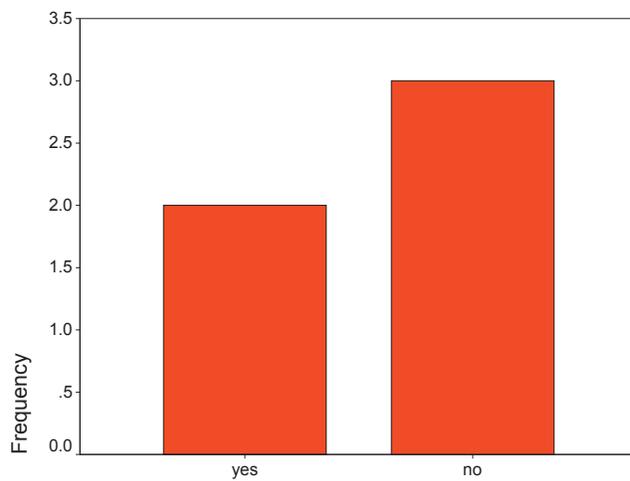
Implementation of a product of  
the research program

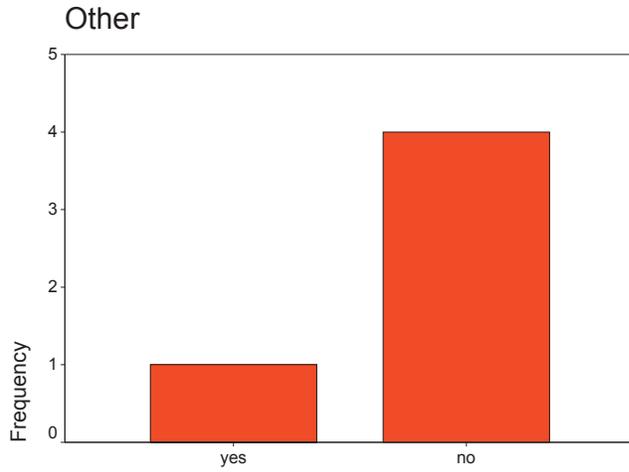


Reviewed research proposals being  
considered for funding

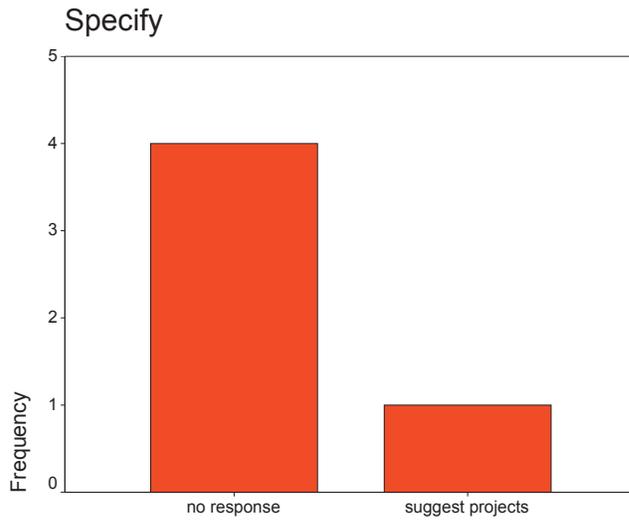


Reviewed final reports

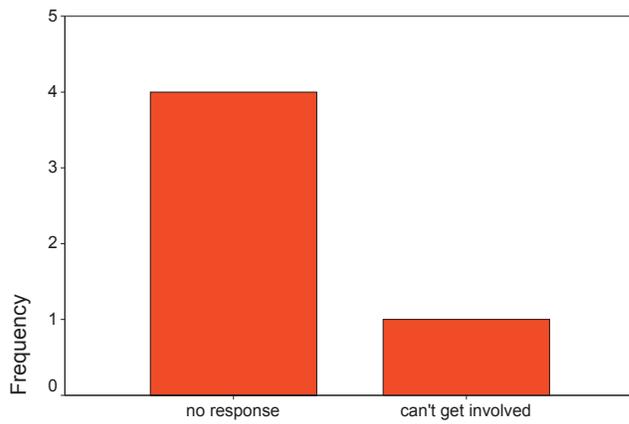




Other



What is the main reason for your lack of involvement?



**Q6: Rate the following activities you expect from the research program.****To solve problems for constituents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not a priority	1	20.0	33.3	33.3
	somewhat priority	1	20.0	33.3	66.7
	high priority	1	20.0	33.3	100.0
	Total	3	60.0	100.0	
Missing	System	2	40.0		
Total		5	100.0		

**To attain national recognition for Ohio and ODOT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not a priority	2	40.0	100.0	100.0
Missing	System	3	60.0		
Total		5	100.0		

**To serve as a technical resource**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat priority	1	20.0	33.3	33.3
	high priority	2	40.0	66.7	100.0
	Total	3	60.0	100.0	
Missing	System	2	40.0		
Total		5	100.0		

**To seek out or propose ways to improve ODOT activities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat priority	3	60.0	60.0	60.0
	high priority	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**To compile best practices from peers and other organizations and share**

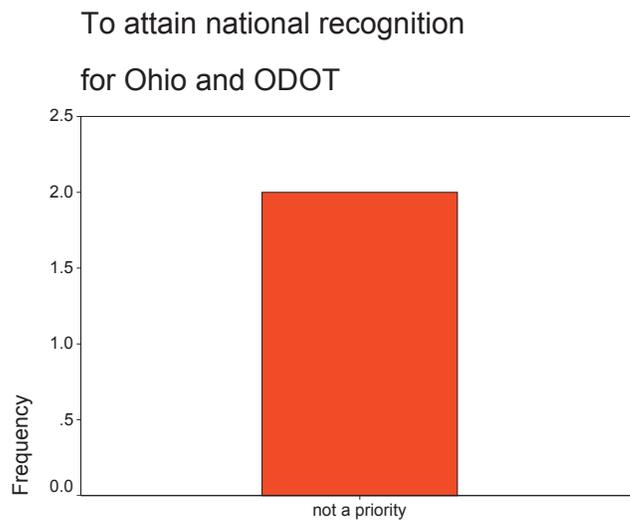
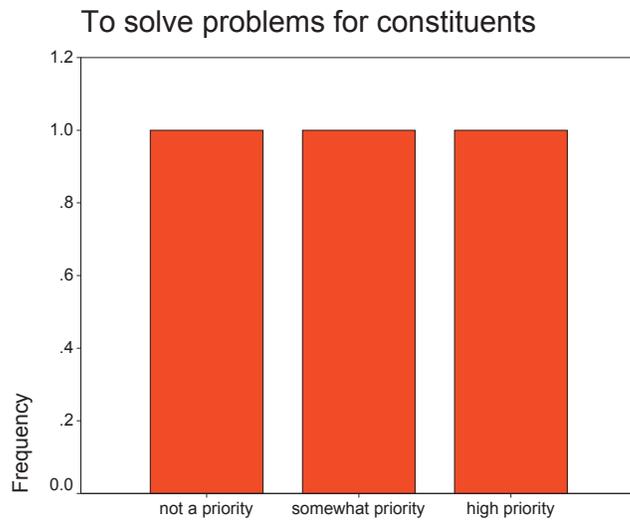
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat priority	2	40.0	66.7	66.7
	high priority	1	20.0	33.3	100.0
	Total	3	60.0	100.0	
Missing	System	2	40.0		
Total		5	100.0		

**Other**

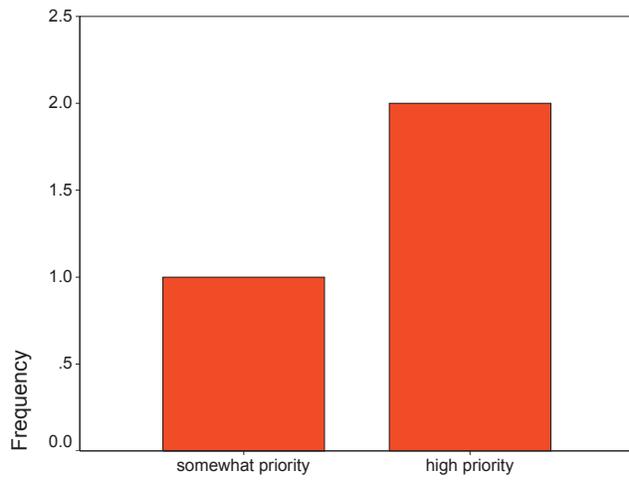
	Frequency	Percent
Missing System	5	100.0

**Specify**

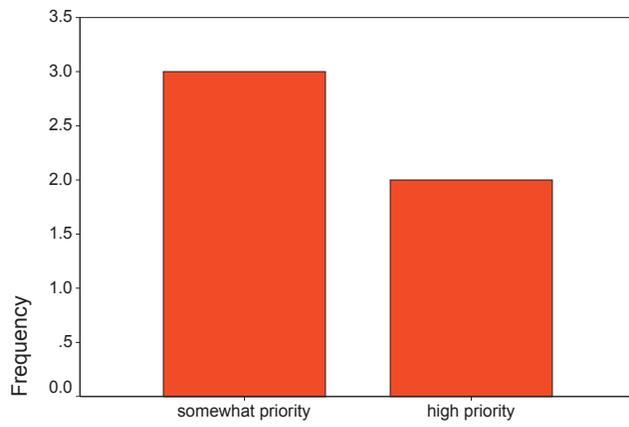
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
find products to stretch resources	1	20.0	20.0	100.0
Total	5	100.0	100.0	



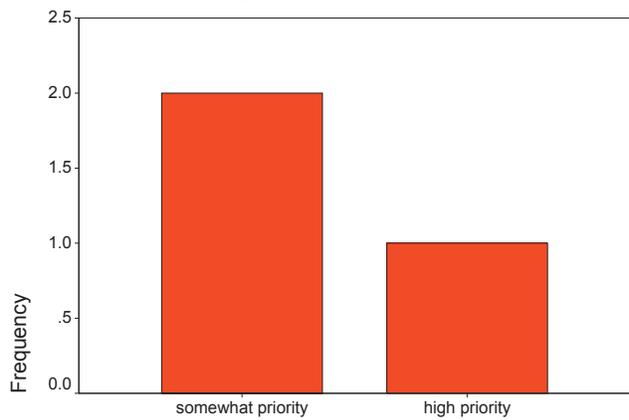
### To serve as a technical resource

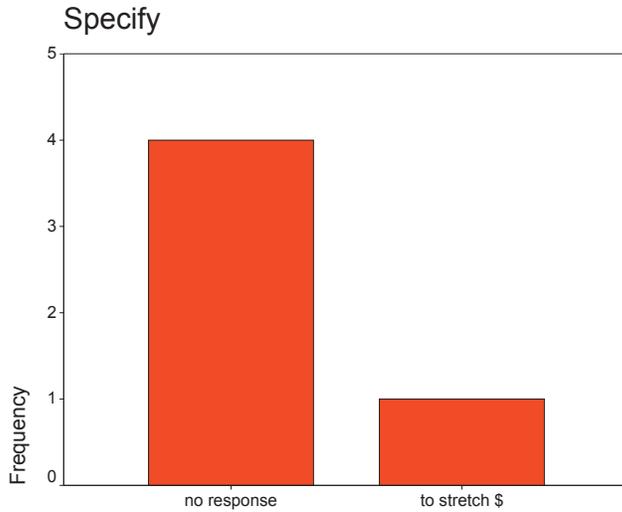


### To seek out or propose ways to improve ODOT activities



### To compile best practices from peers and other organizations and share

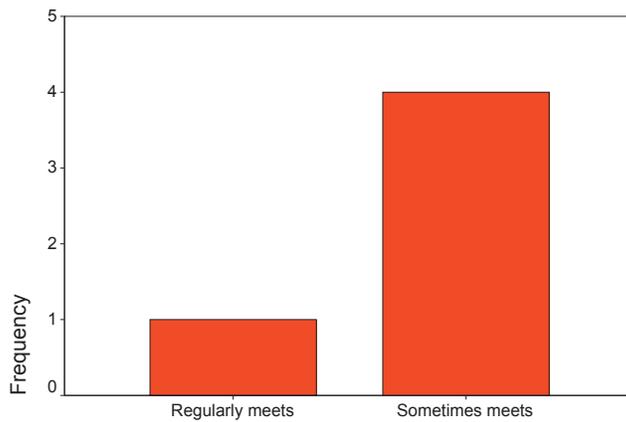




**Q7: Which of the following statements best describes the extent to which your expectations are being met?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Research regularly meets my/my department's expectations	1	20.0	20.0	20.0
	Research sometimes meets my/my department's expectations	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

To what extent are your expectations being met by the research office?



**Q8: How do you learn of research program activities?****Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
Nat'l Composite Technology	1	20.0	20.0	60.0
OTEC	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
newspapers	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Specify type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
Monique	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Specify type**

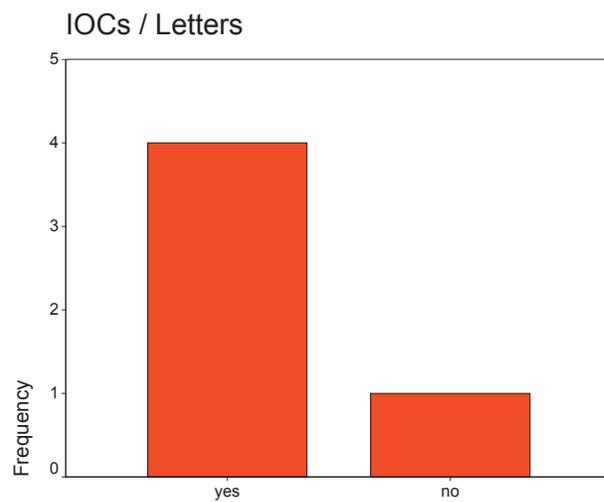
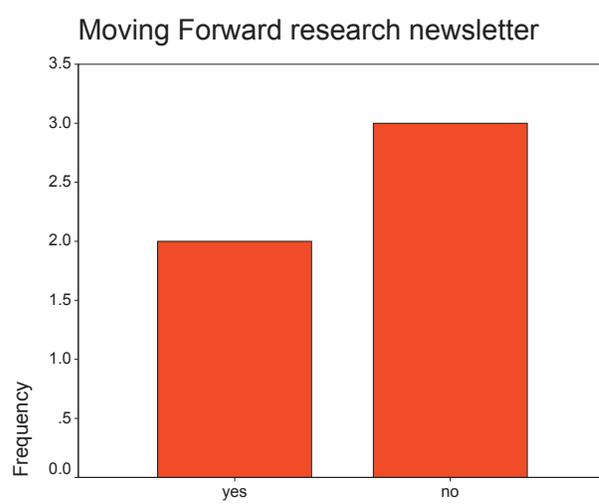
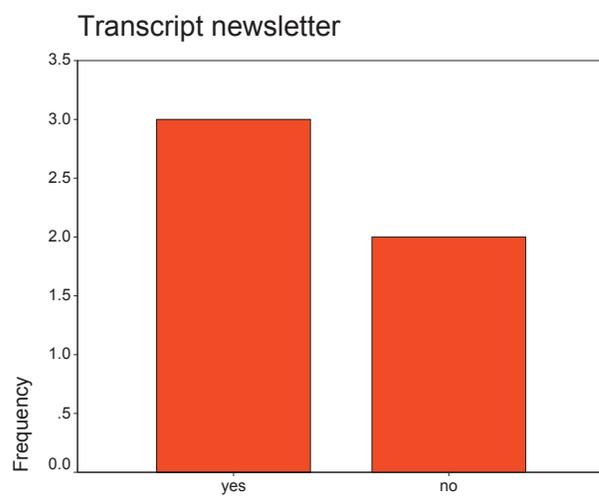
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
FHWA	1	20.0	20.0	80.0
reports	1	20.0	20.0	100.0
Total	5	100.0	100.0	

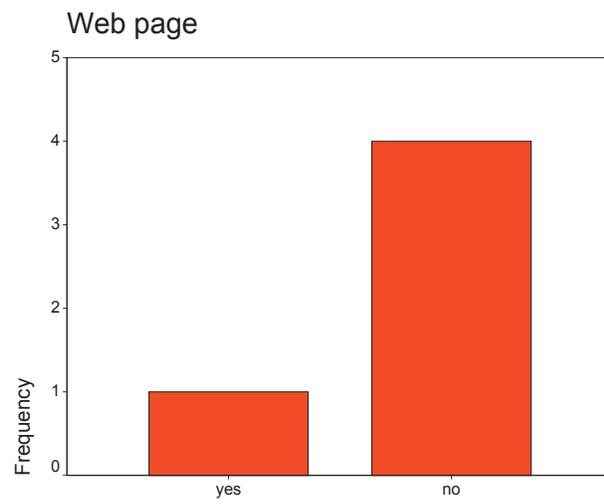
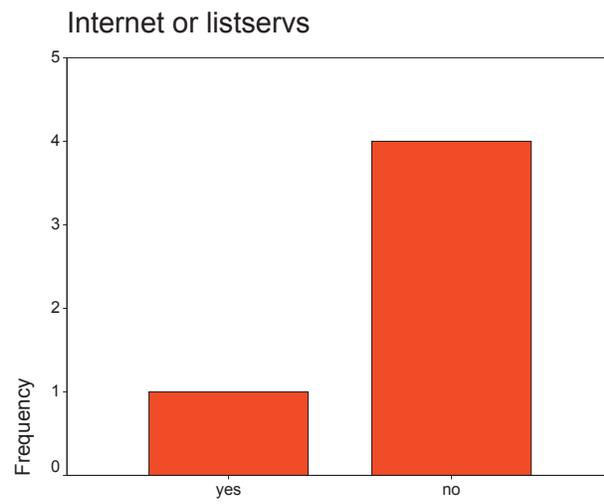
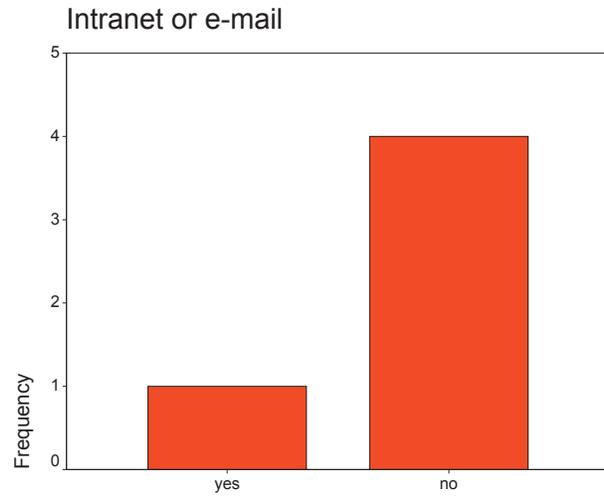
**Other**

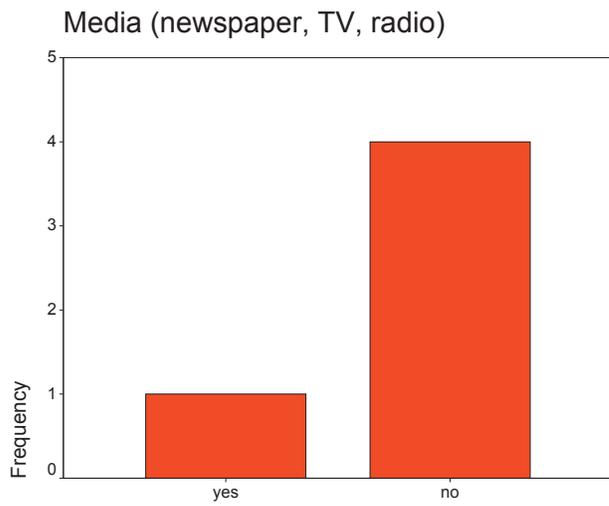
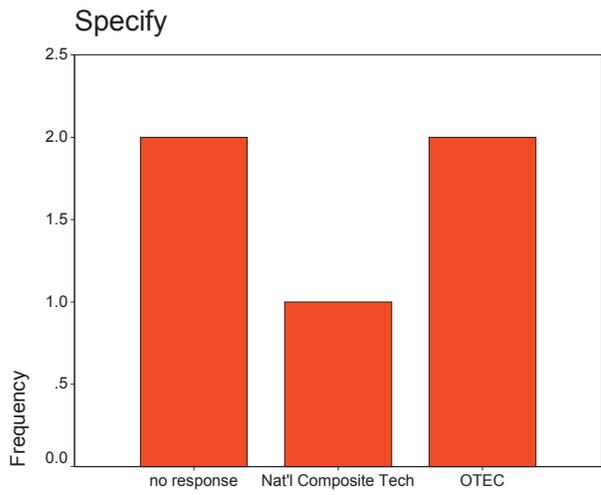
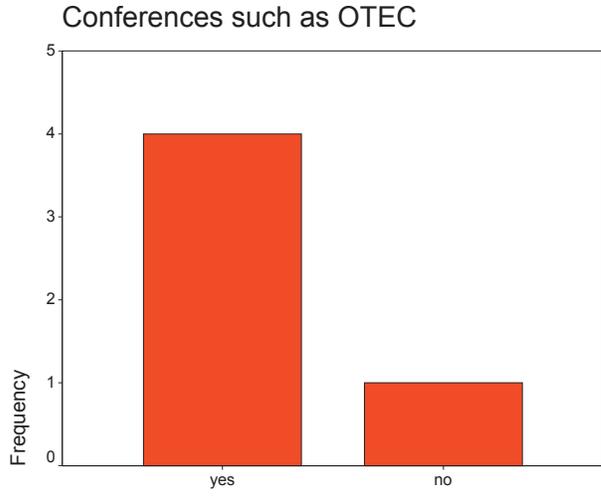
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

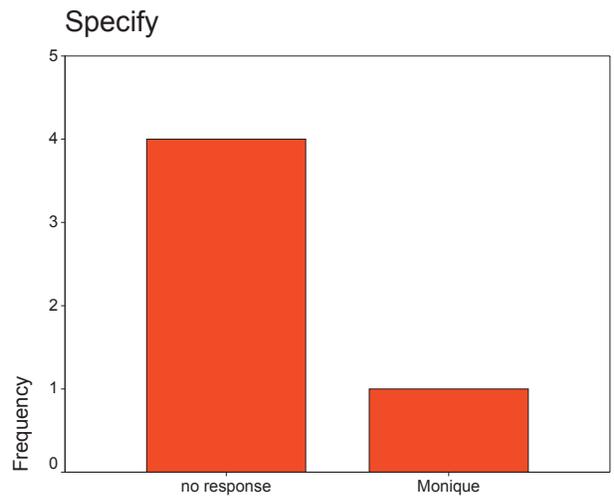
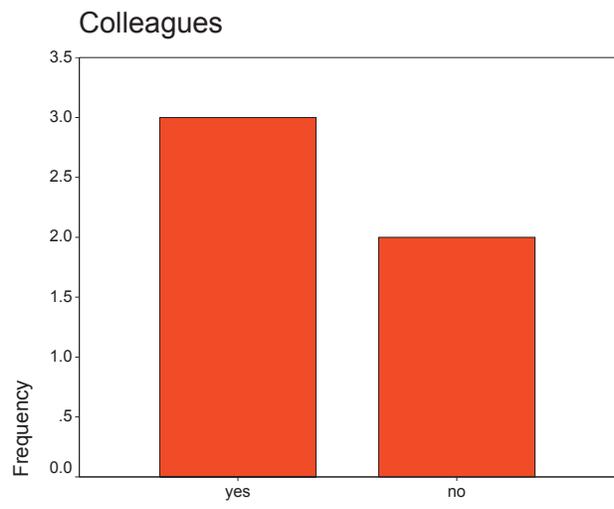
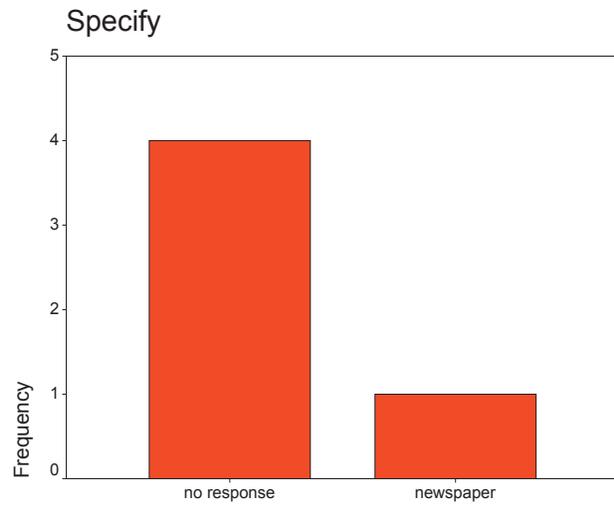
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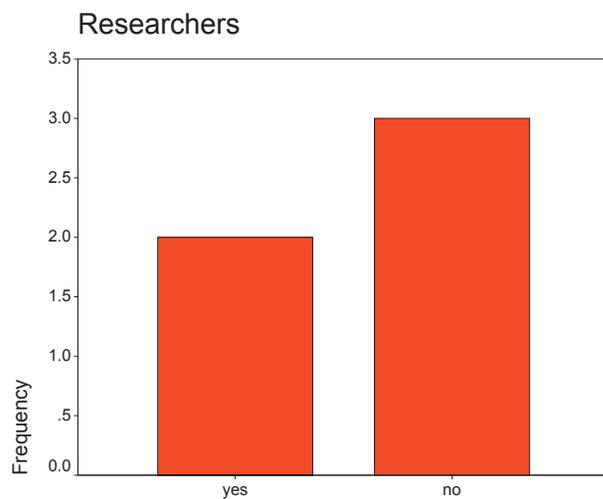
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
I am involved with the management of the program	1	20.0	20.0	100.0
Total	5	100.0	100.0	







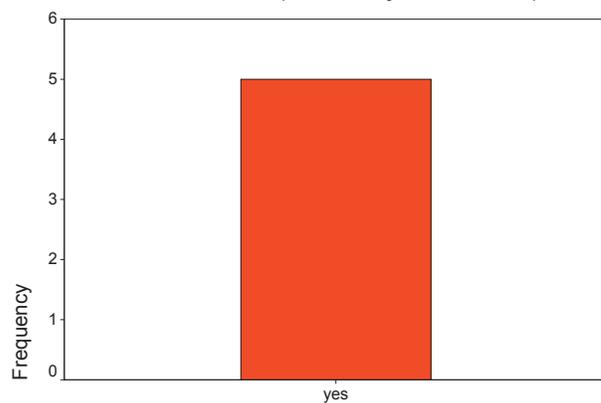




**Q9: Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquires)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

Do you find the Research Office  
to be accessible (i.e., easy to contact)?



**Q10: Are you aware of any research program activities that resulted in the following?**

**Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid orange lights removed from barrels	4	80.0	80.0	80.0
Total	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Safety improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid bridge monitoring	4	80.0	80.0	80.0
Total	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Quality improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
faster,smarter,better bridge	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
SHRP,superpave	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

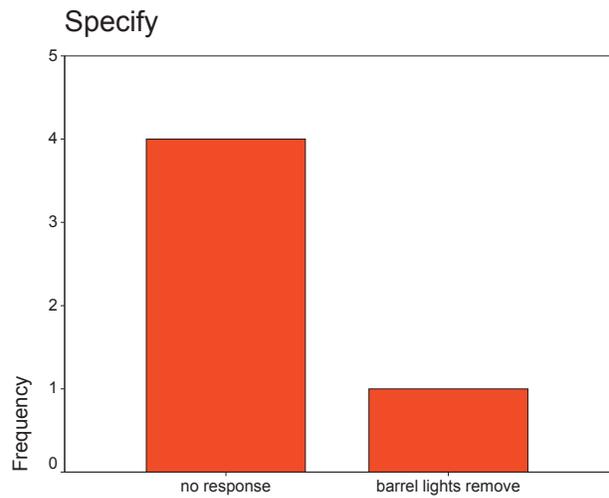
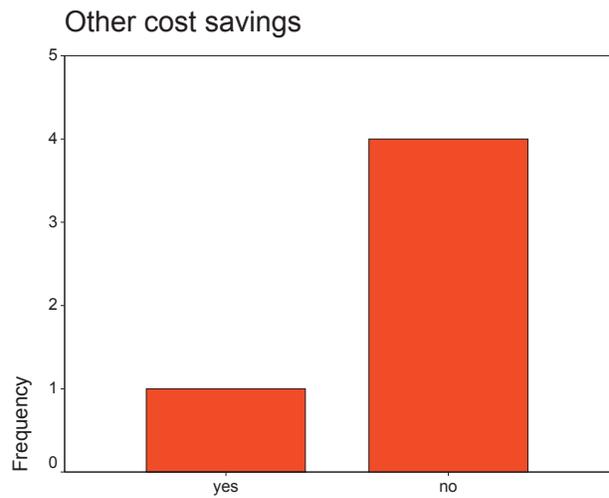
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
ease of bridge replacement	1	20.0	20.0	100.0
Total	5	100.0	100.0	

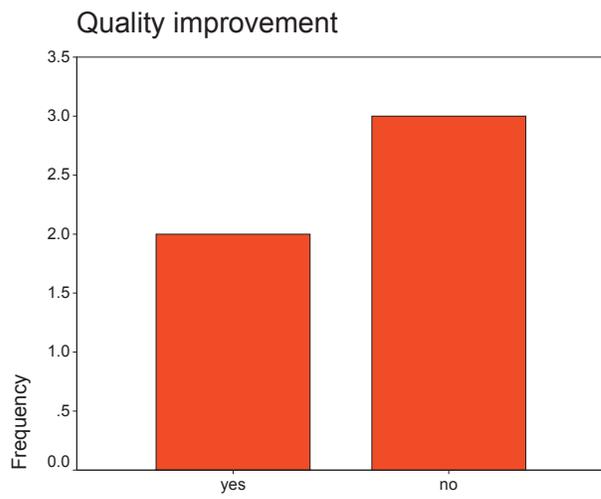
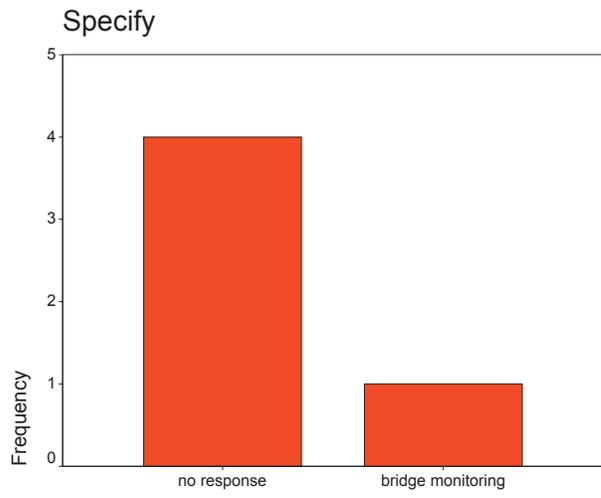
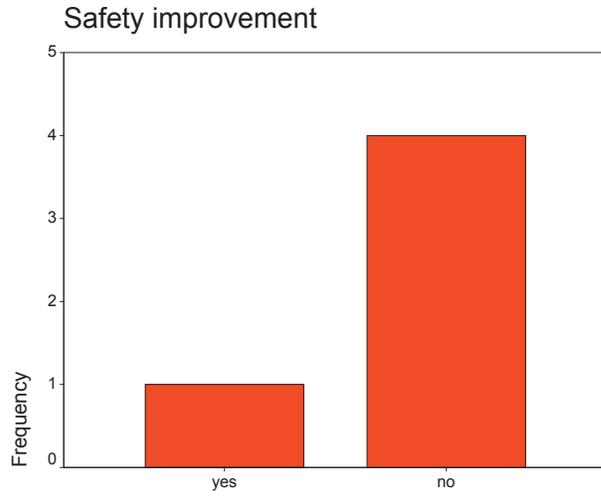
**Other**

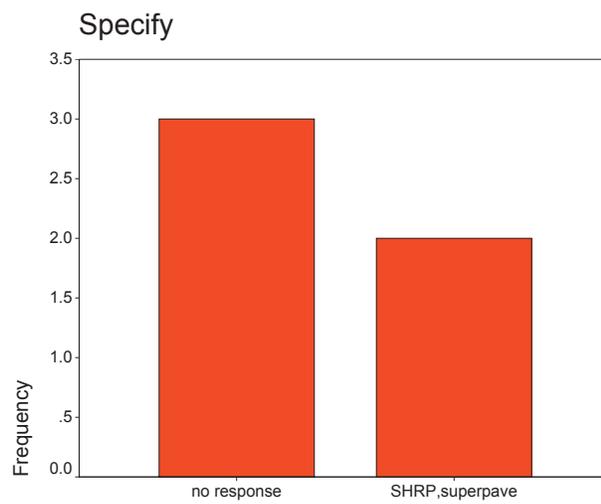
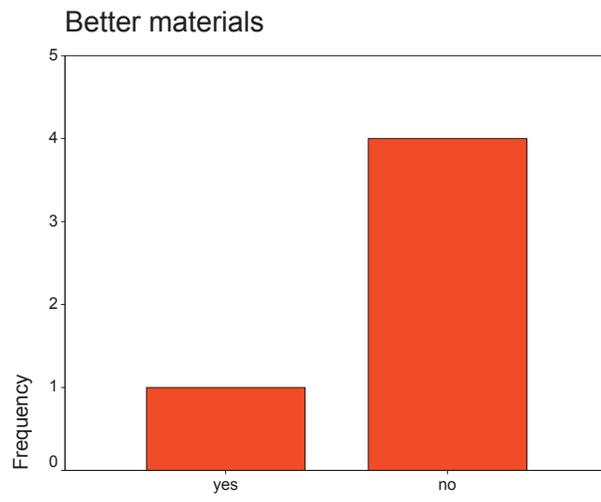
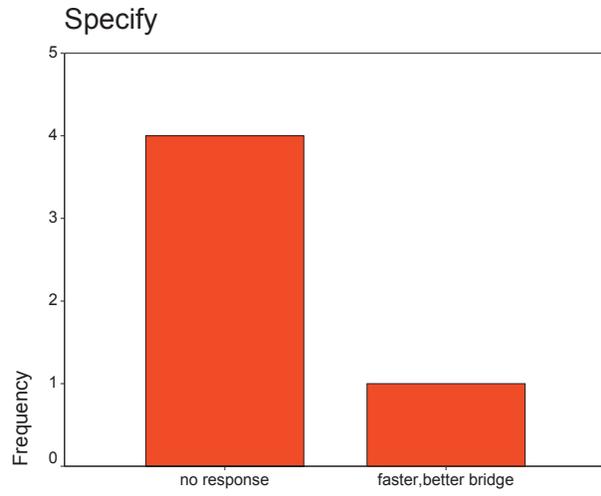
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

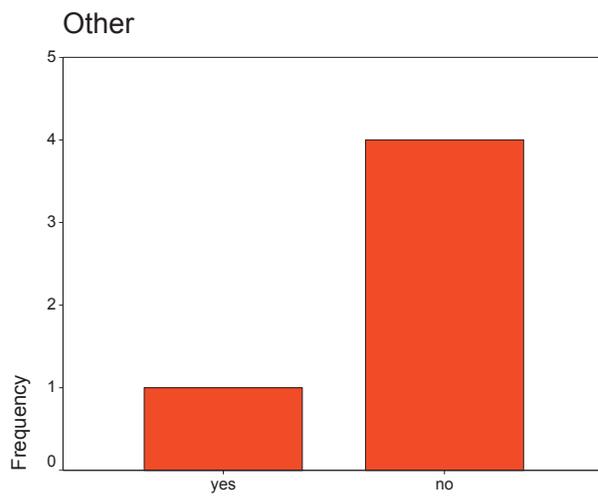
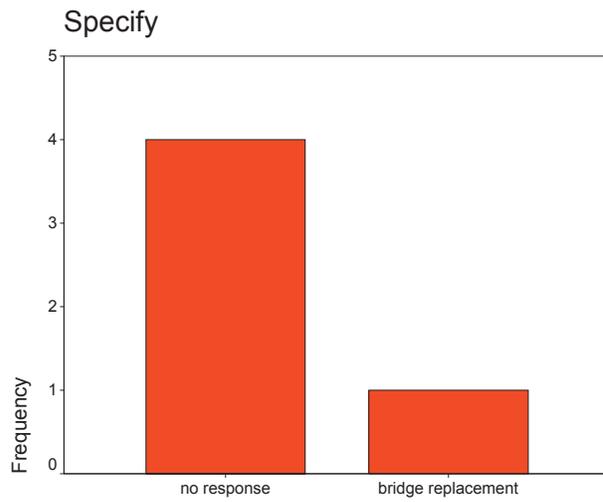
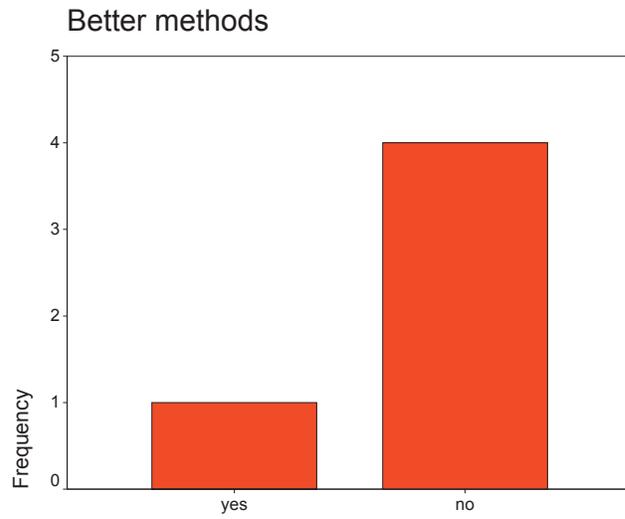
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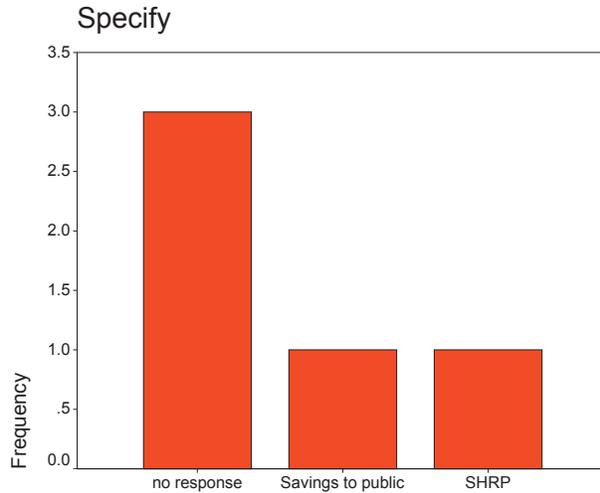
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
Savings to the motoring public with the bridge design project to expedite construction.	1	20.0	20.0	80.0
SHRP	1	20.0	20.0	100.0
Total	5	100.0	100.0	











**Q11: Have you heard of the following projects?**

**SHRP pavement project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

**Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

### Development of Crash Reduction Techniques

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

### Innovative Bridge Design Construction Techniques to Expedite Construction

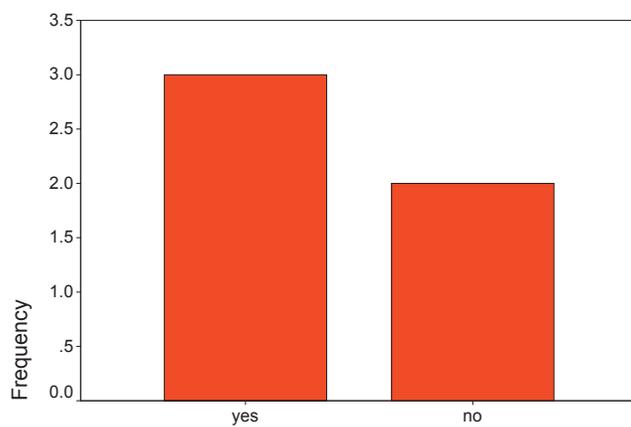
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

### Comparison and Definition of State DOT Practices in Selection of Pavement Materials

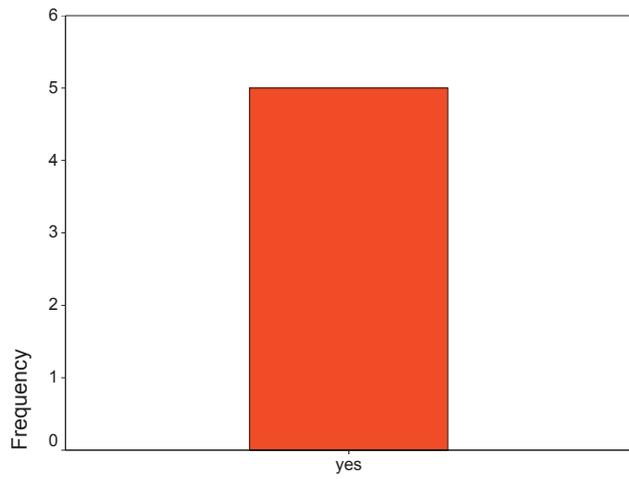
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

### SHRP pavement project

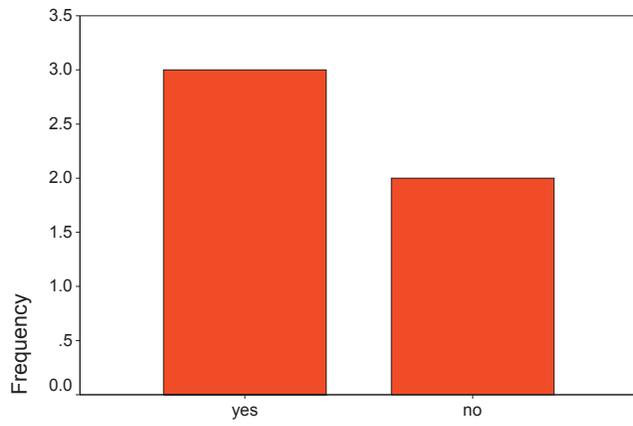
#### on Delaware 23



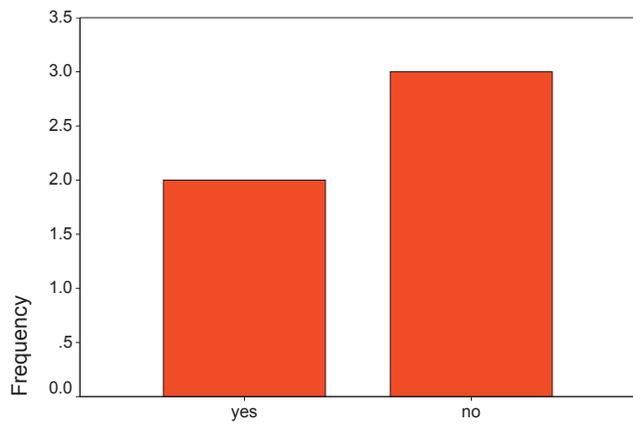
Ohio Freight Study

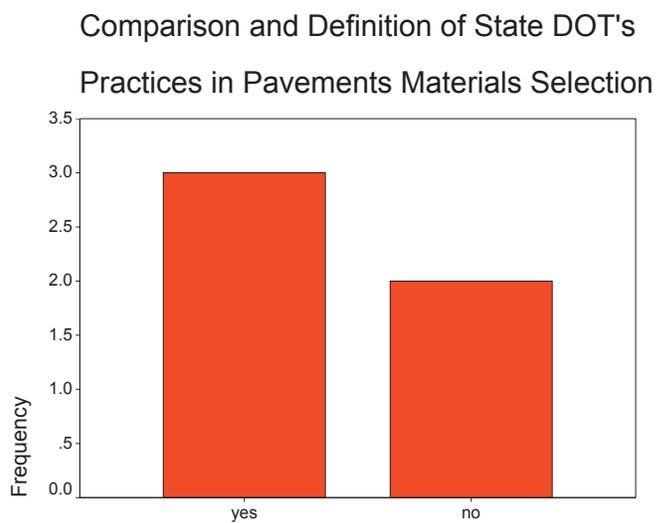
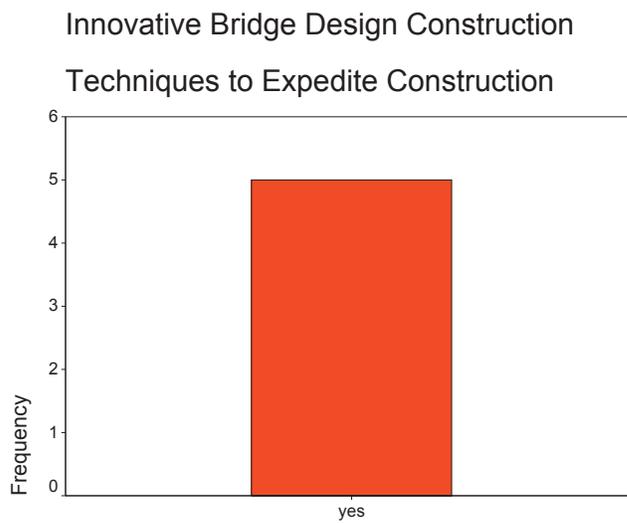
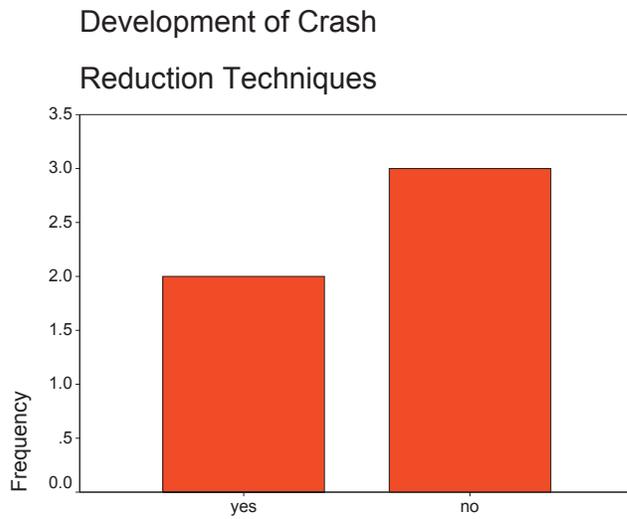


Evaluation of Warranty Provisions  
on ODOT Construction Projects



Evaluation of Drainable Bases Under  
Asphalt Pavement





**Q11A: How did you hear of them?****Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Memoranda / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
OTEK	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Colleagues**

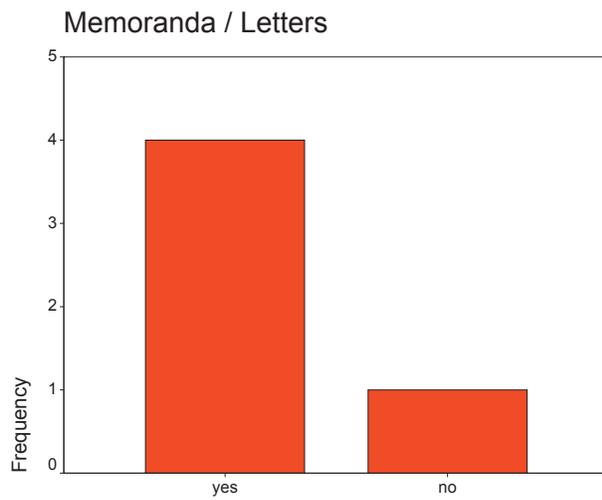
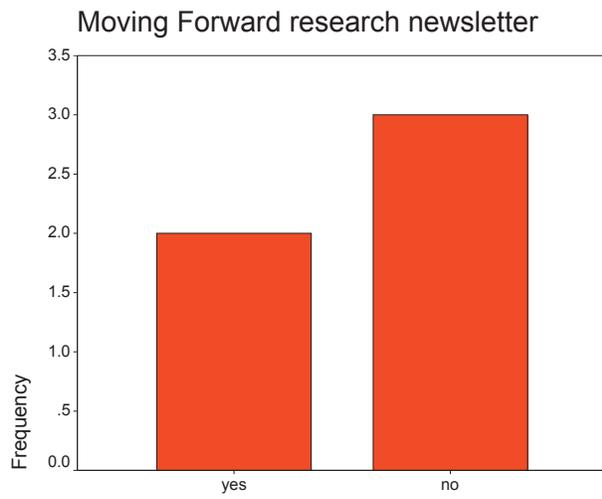
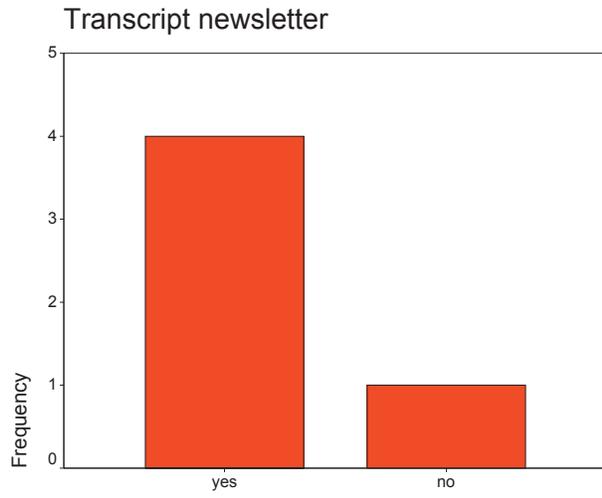
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

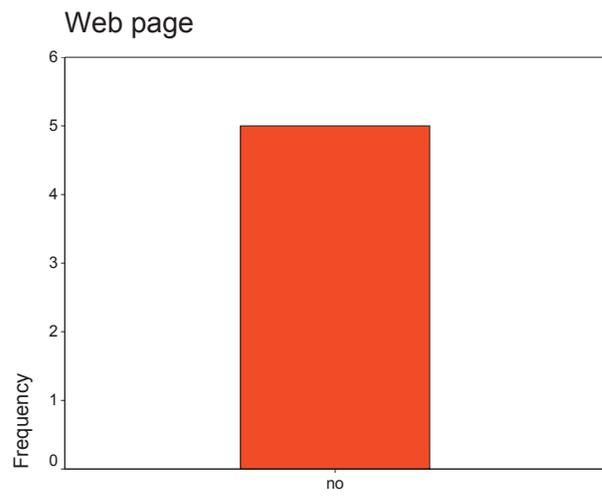
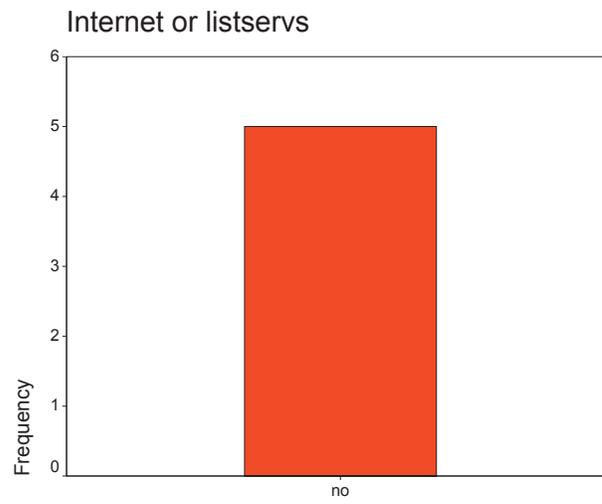
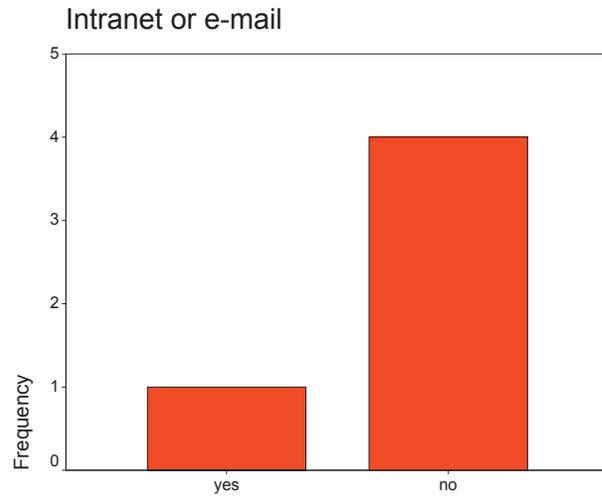
**Other**

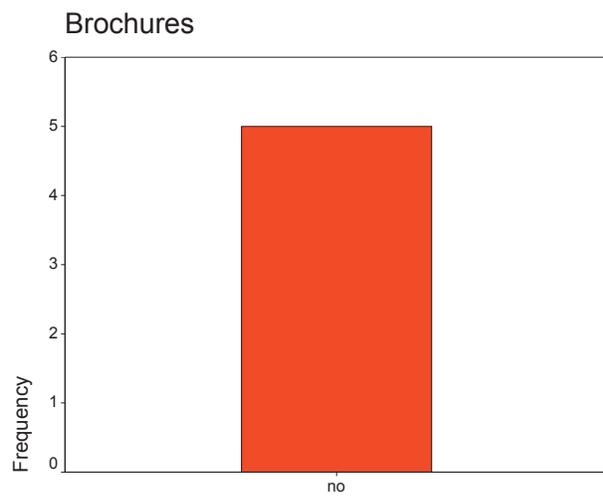
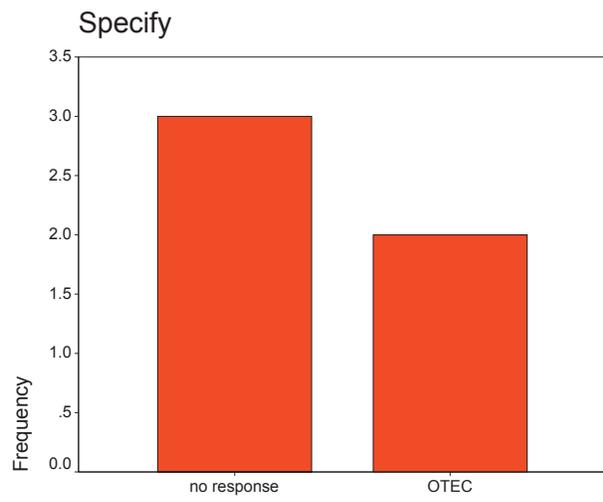
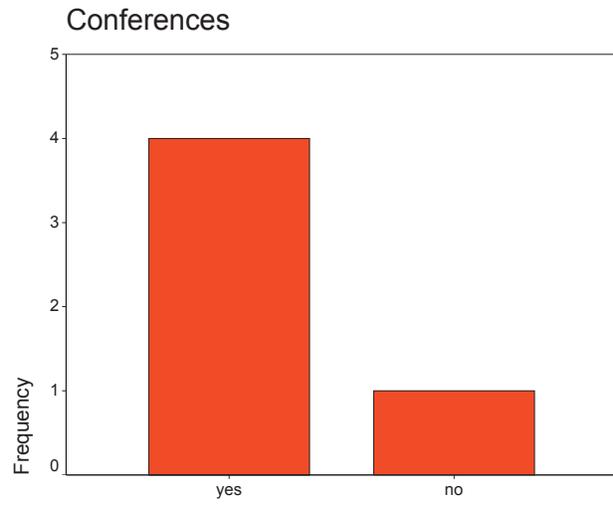
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

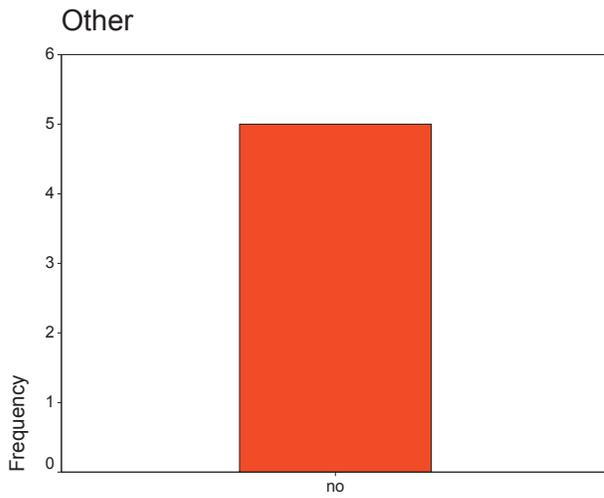
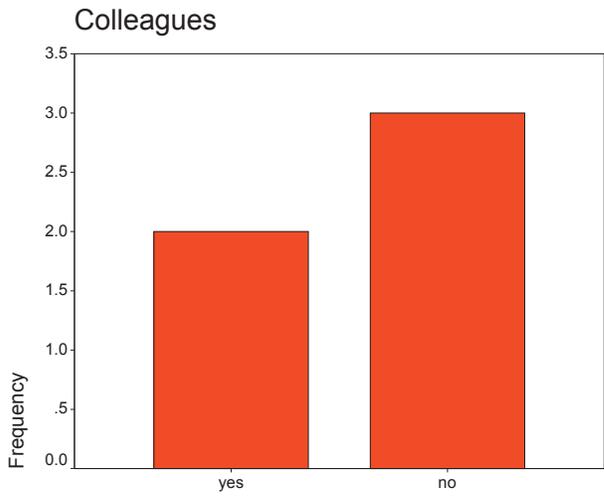
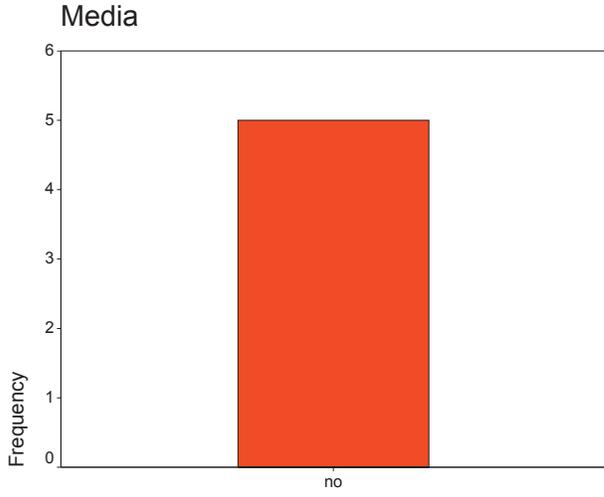
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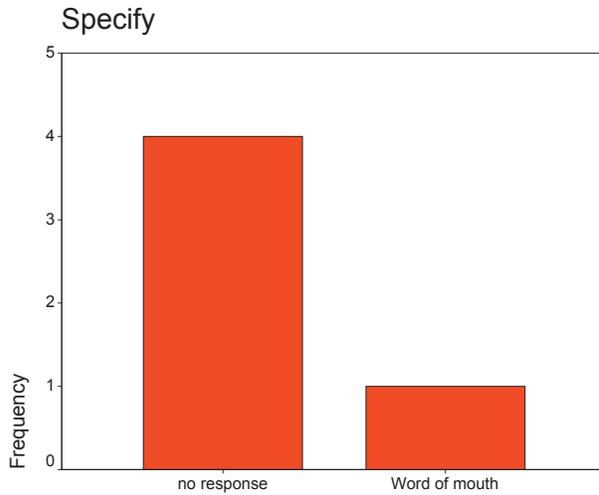
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
Word of mouth	1	20.0	20.0	100.0
Total	5	100.0	100.0	











**Q12: What limitations, if any, do you believe the Research Office faces?**

**Inadequate staffing**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Inadequate funding**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Inadequate support from sponsors**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Risk of no payoff**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Political considerations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**No significant limitations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

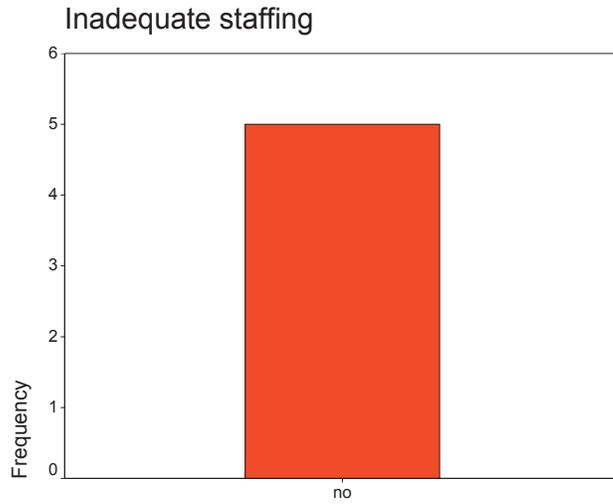
**Other**

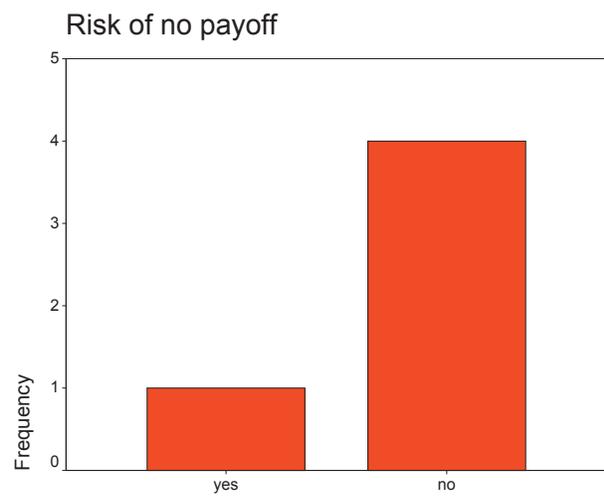
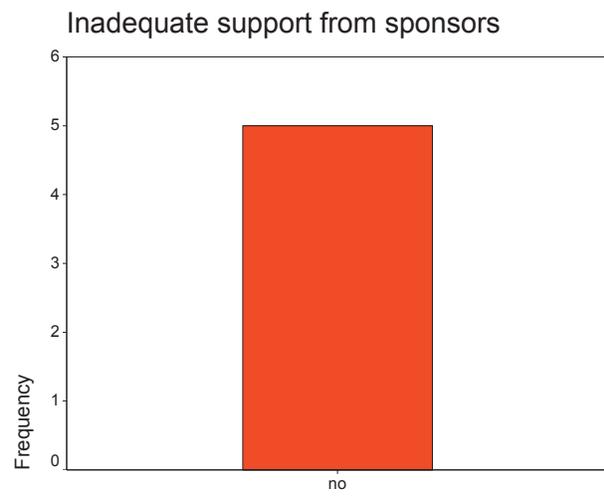
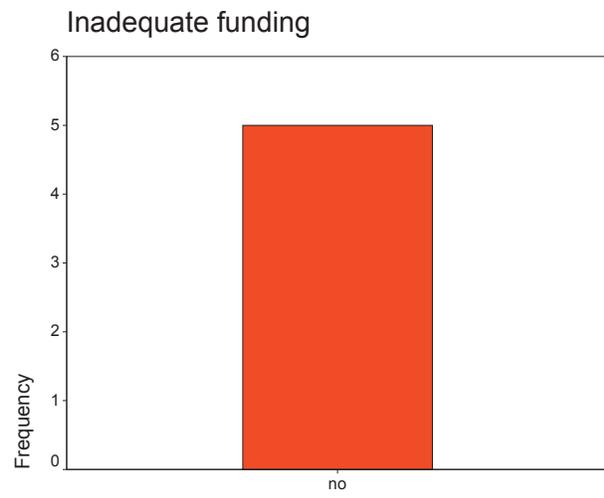
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

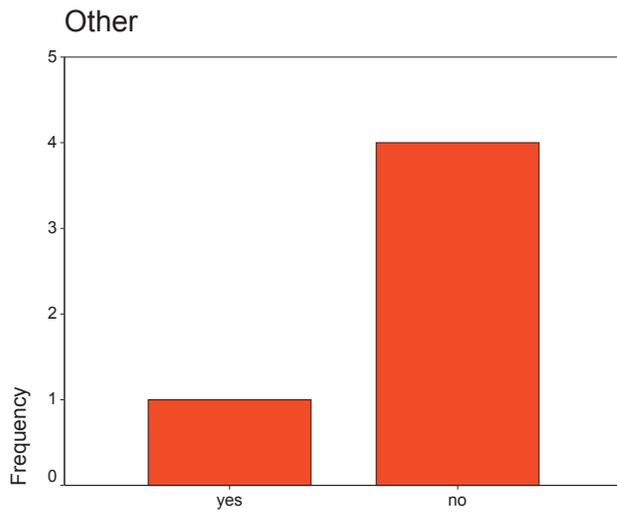
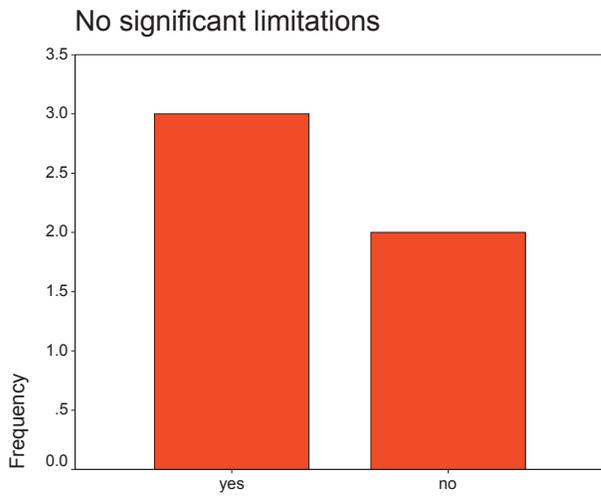
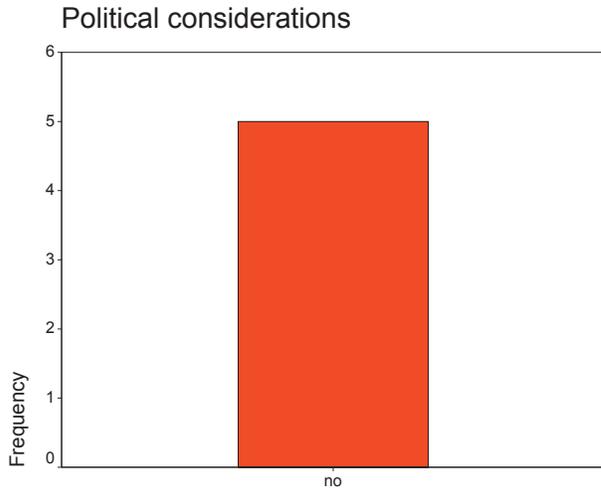
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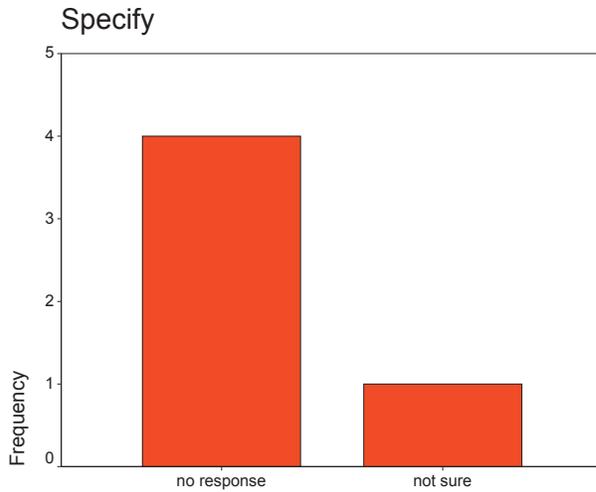
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
not sure	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**What limitations do you believe the Research Office faces?**









**Q13: What is your preferred source of information about the research program?**

**Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
OTEC	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

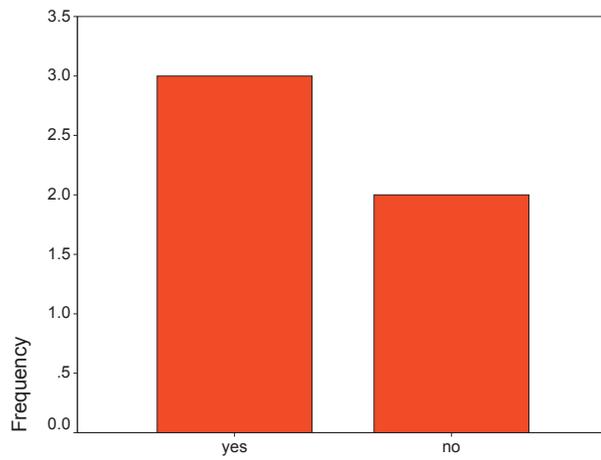
**Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

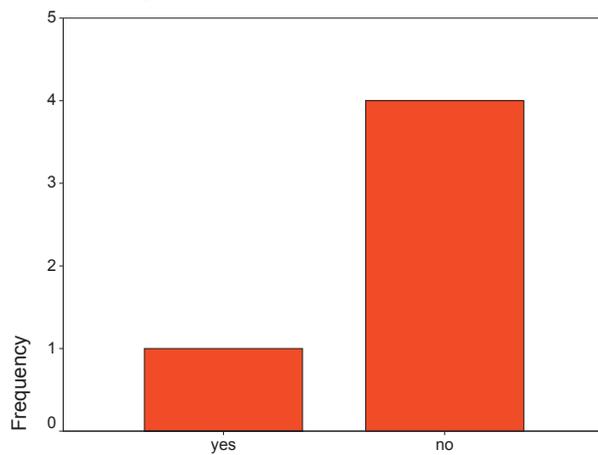
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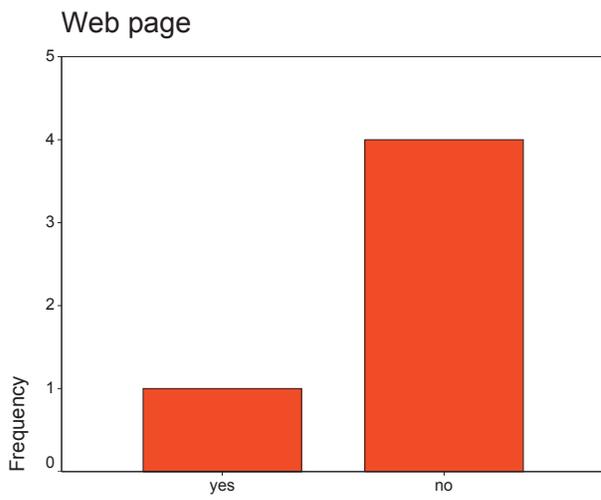
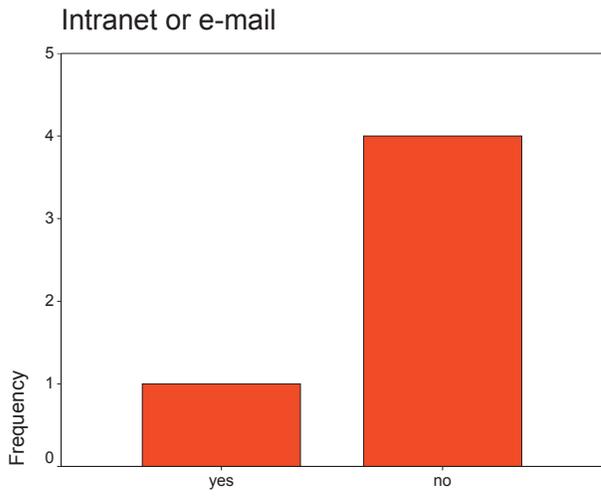
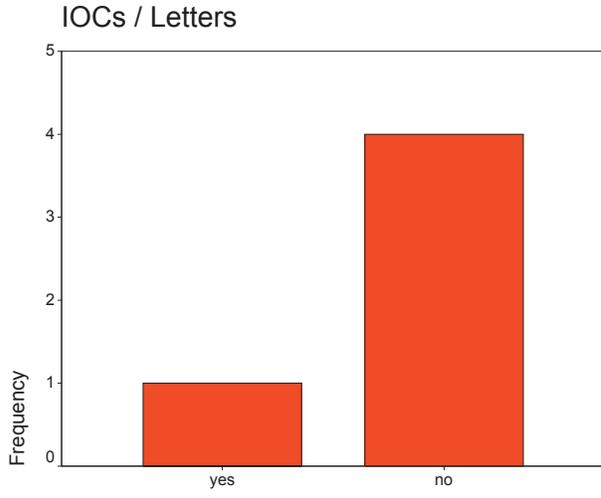
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
monthly one-page summary/report	1	20.0	20.0	80.0
reports sent to district	1	20.0	20.0	100.0
Total	5	100.0	100.0	

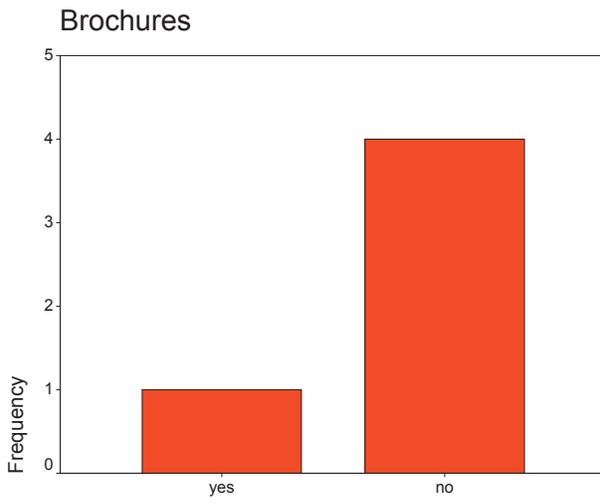
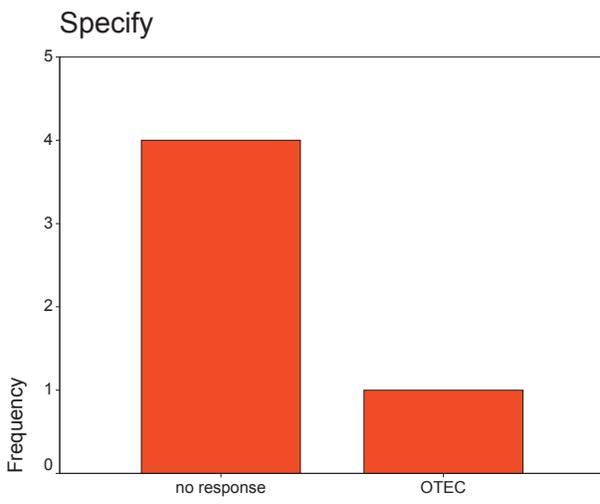
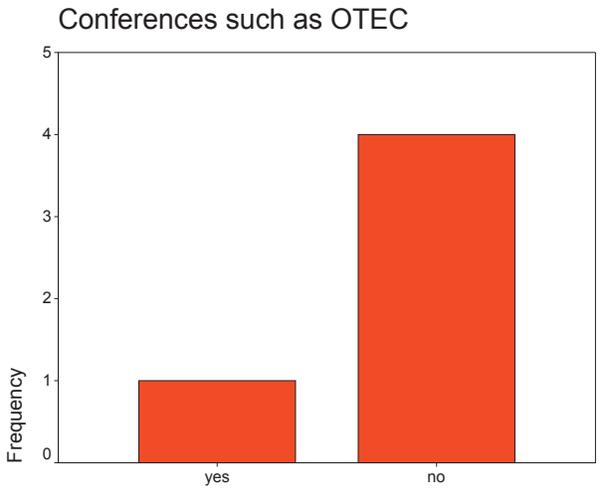
## Transcript newsletter

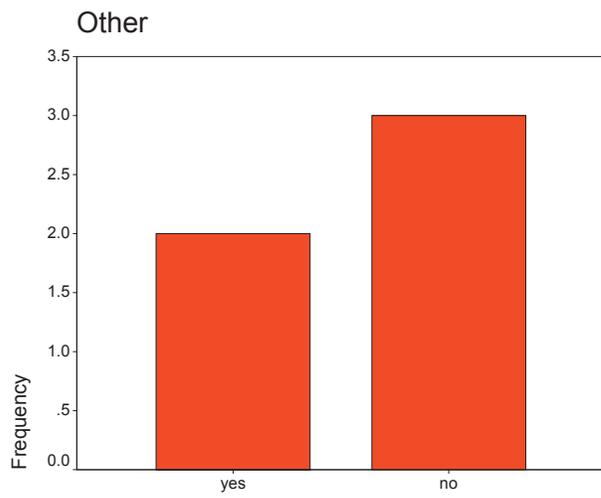
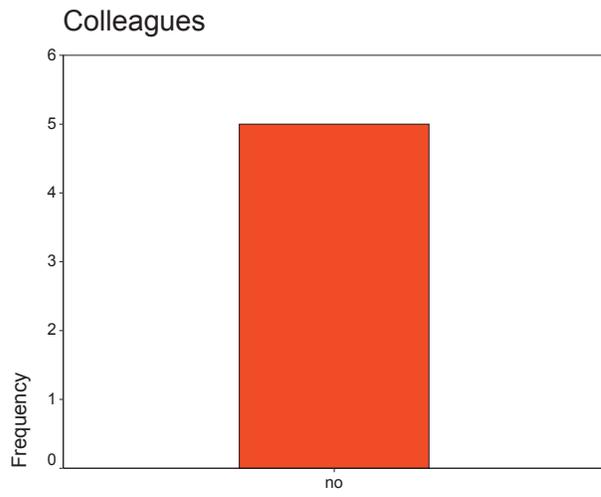
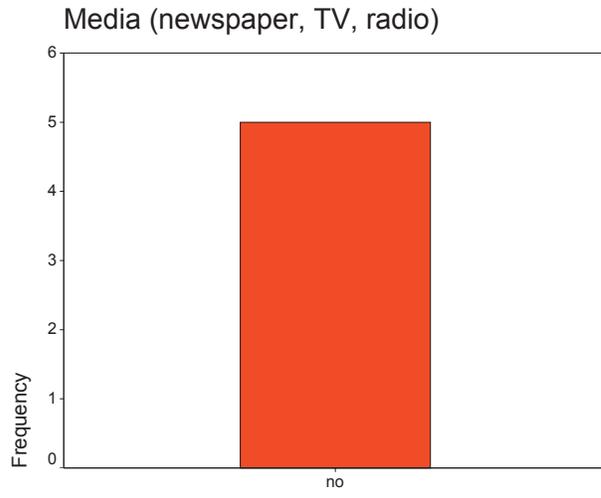


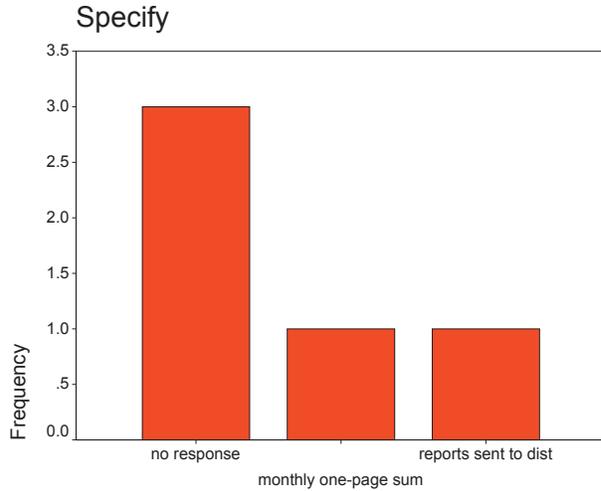
## Moving Forward research newsletter







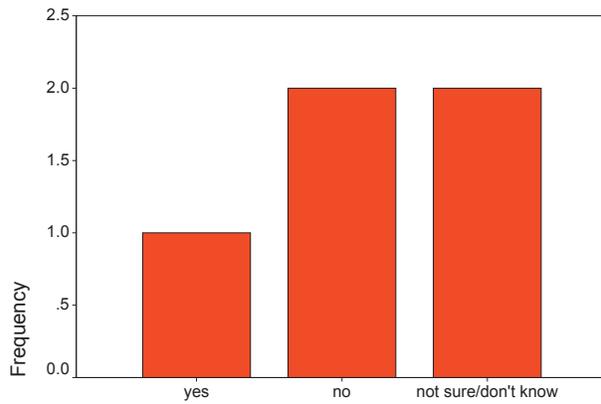




**Q14: Do you feel that you are part of the research program's strategic planning process?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	2	40.0	40.0	60.0
not sure/don't know	2	40.0	40.0	100.0
Total	5	100.0	100.0	

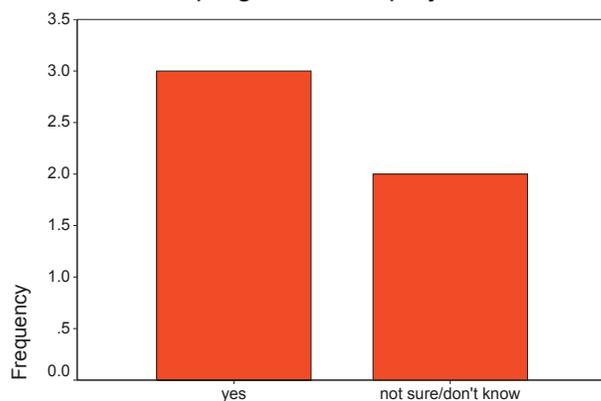
Do you feel you are part of the research program's strategic planning process?



**Q15: Do you feel that you have input into the research program at the project level?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
not sure/don't know	2	40.0	40.0	100.0
Total	5	100.0	100.0	

Do you feel that you have input into the research program at the project level?



**Q16: What types of research activities are you most interested in knowing about?**

**Requests for Proposals**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Ohio success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Strategic research plan**

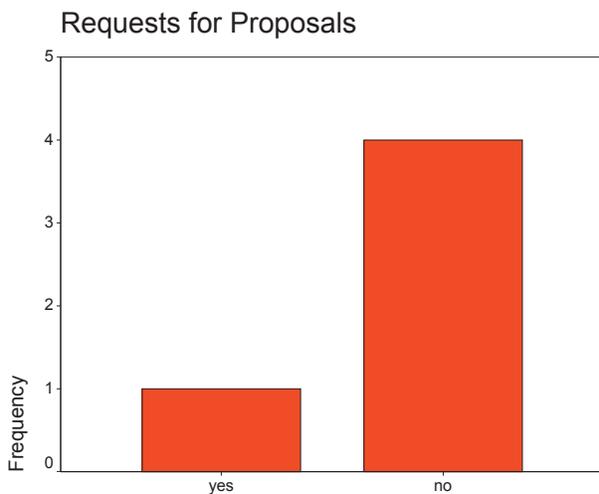
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

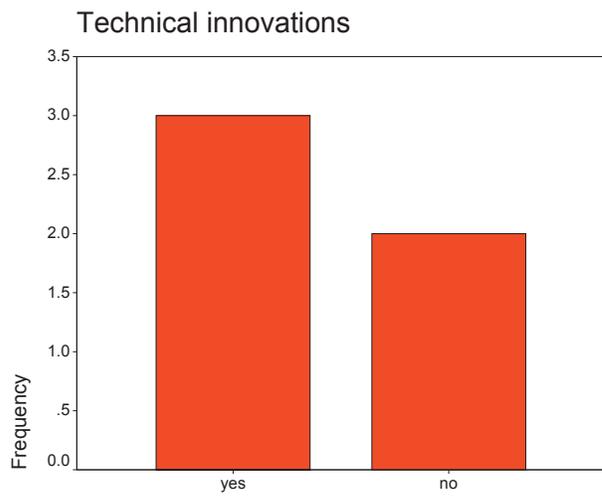
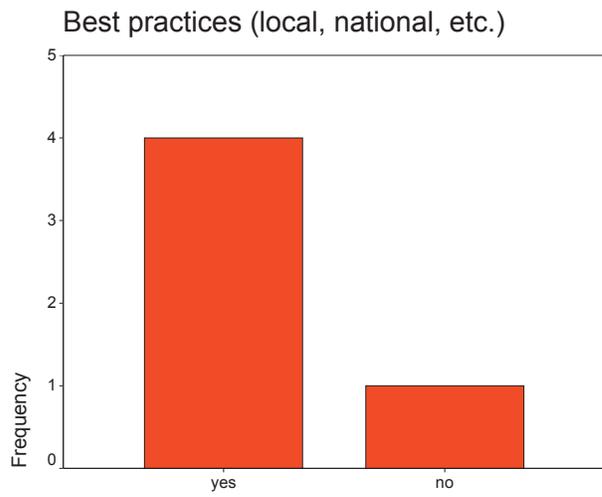
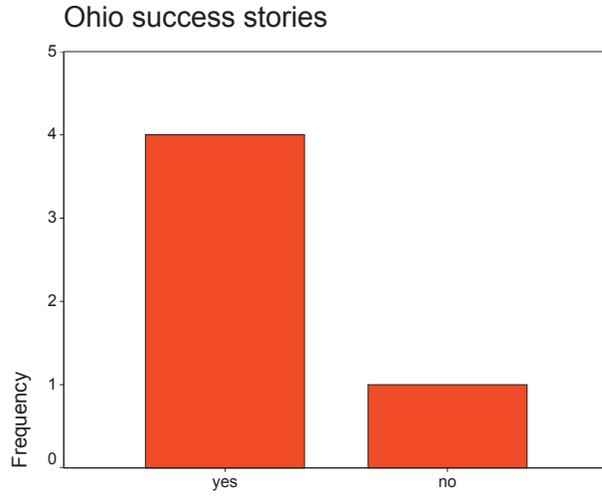
**Training opportunities**

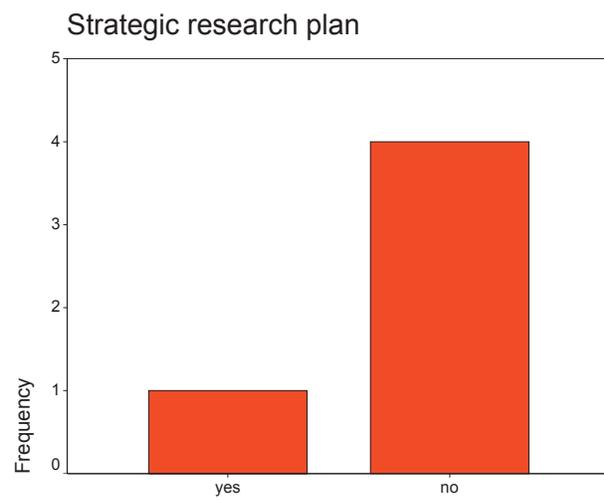
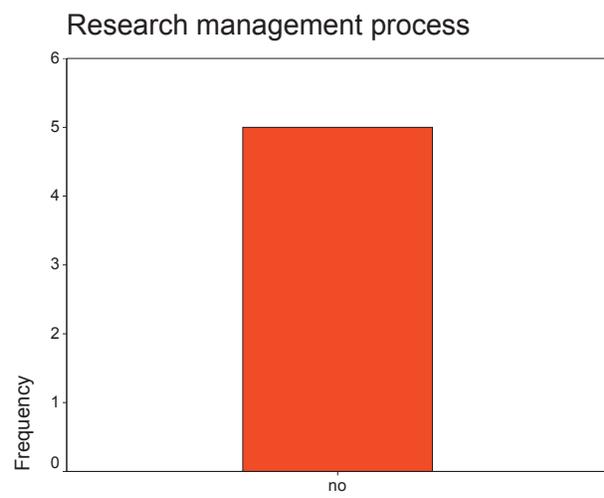
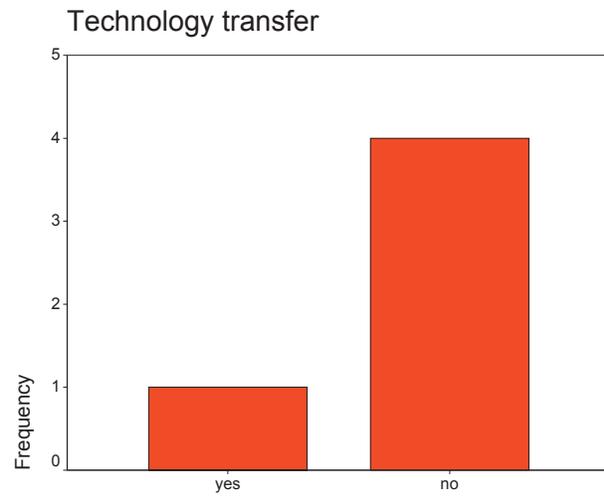
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

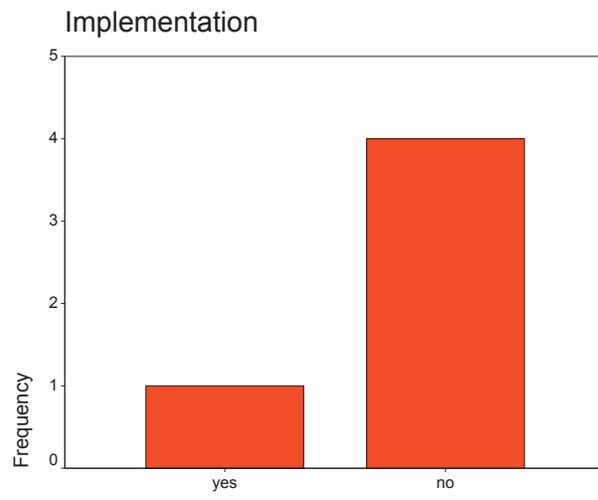
**Implementation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	





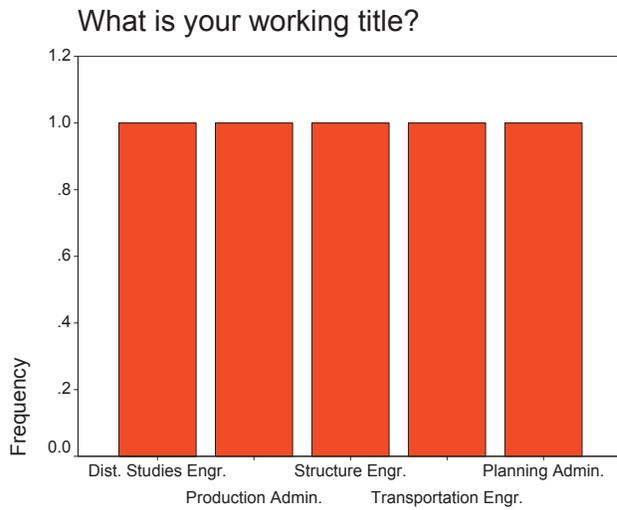




## Appendix E District Research Offices Survey Results

### Q1. What is your working title?

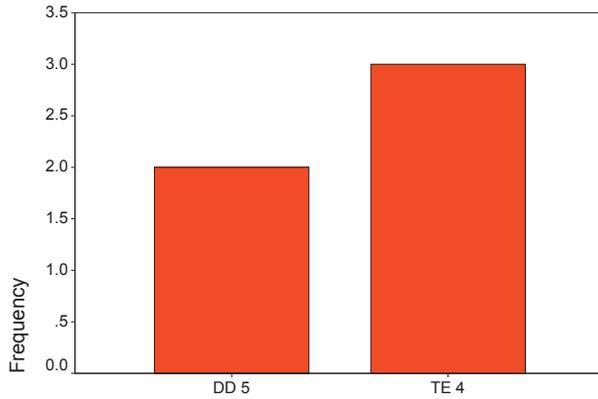
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	District Studies Engineer	1	20.0	20.0	20.0
	Production Admin.	1	20.0	20.0	40.0
	Structure Planning Engineer	1	20.0	20.0	60.0
	Transportation Engineer	1	20.0	20.0	80.0
	Transportation Planning & Programs Admin.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



### Q2. What is your work classification (e.g., TE 3)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DD 5	2	40.0	40.0	40.0
	TE 4	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

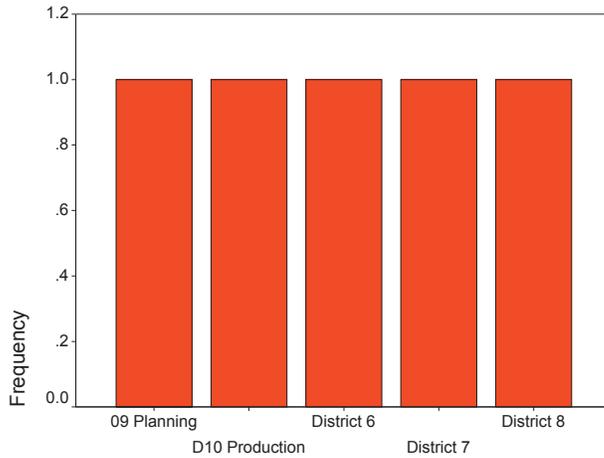
What is your work classification  
(e.g., TE 3)?



**Q3. In what division/office are you employed?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 09 Planning	1	20.0	20.0	20.0
D10 Production	1	20.0	20.0	40.0
District 6	1	20.0	20.0	60.0
District 7	1	20.0	20.0	80.0
District 8	1	20.0	20.0	100.0
Total	5	100.0	100.0	

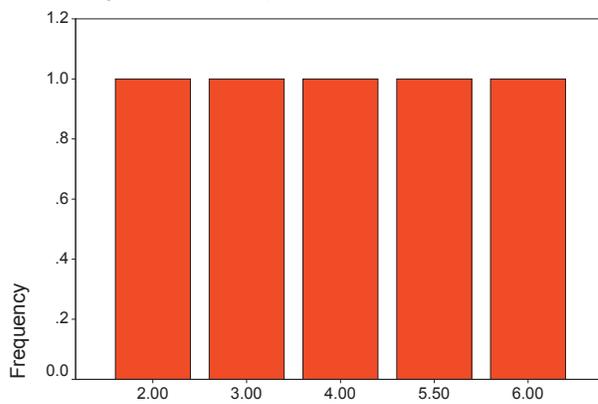
In what division/office are you employed?



**Q4. How many years have you been employed in your current position?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	20.0	20.0	20.0
	3.00	1	20.0	20.0	40.0
	4.00	1	20.0	20.0	60.0
	5.50	1	20.0	20.0	80.0
	6.00	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

How many years have you been employed  
in your current position?

**Q5. To what degree would you say you are involved in the research program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very involved	2	40.0	40.0	40.0
	somewhat involved	1	20.0	20.0	60.0
	not very involved	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**Q5A. In what ways are you involved?****Project monitor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	60.0	60.0	60.0
	no	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**Supplied research needs/project ideas**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Implementation of a product of the research program**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Reviewed research proposals being considered for funding**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Reviewed final reports**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

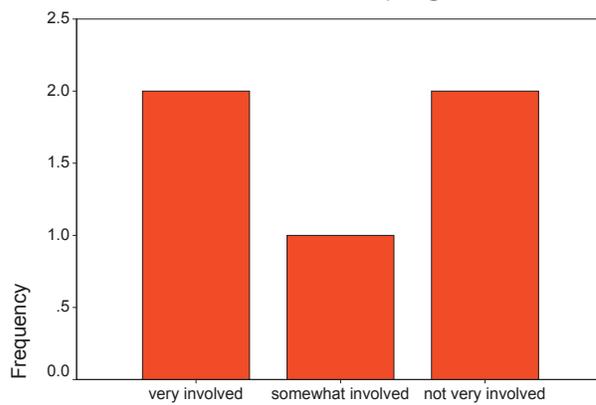
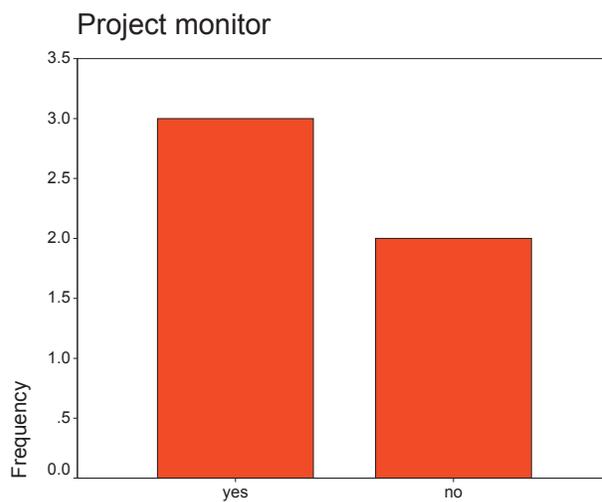
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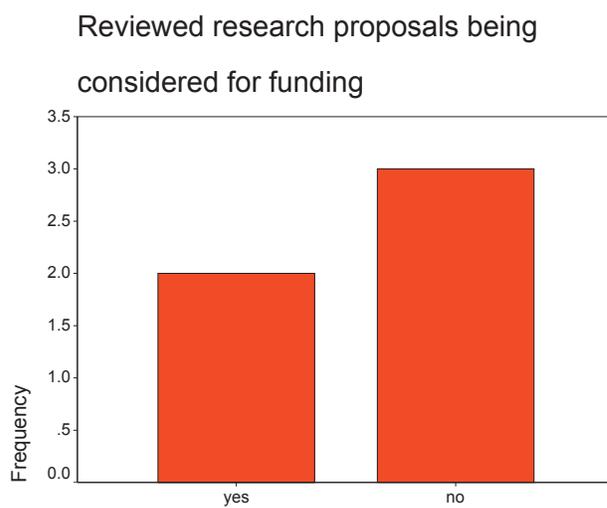
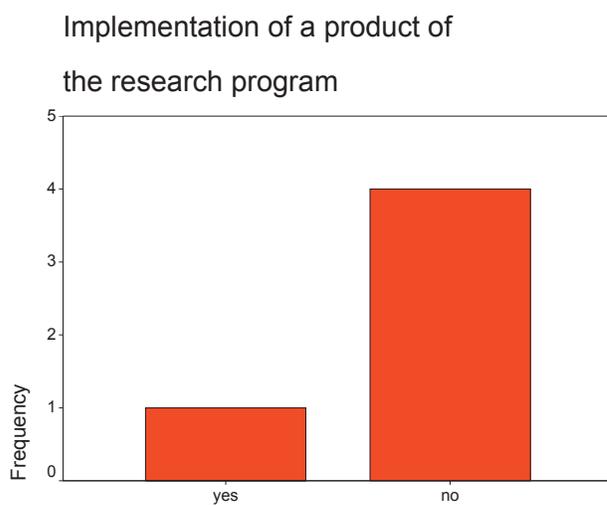
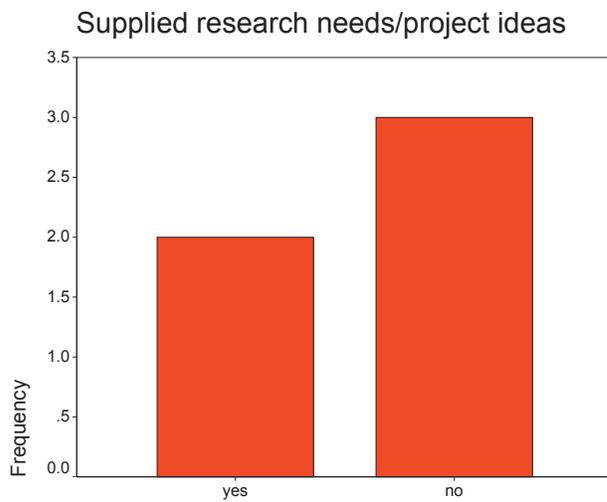
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

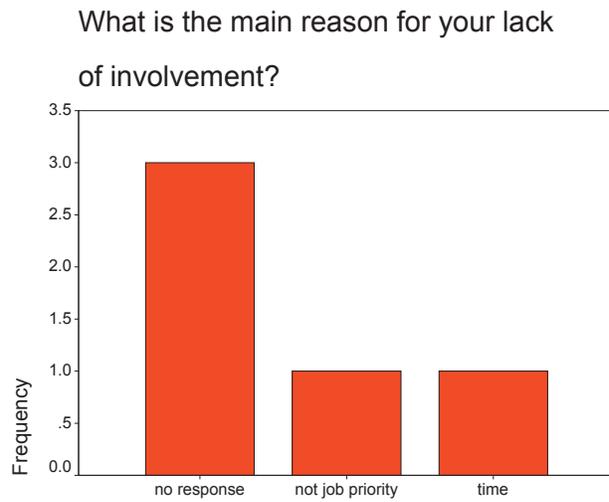
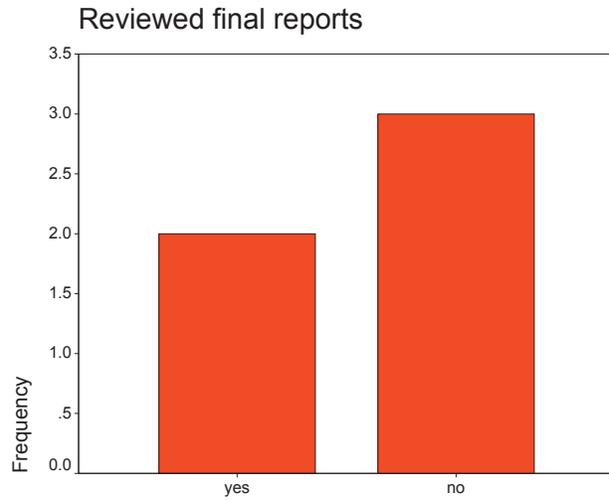
**Q5B. What is the main reason for your lack of involvement?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
not main job priority	1	20.0	20.0	80.0
Time	1	20.0	20.0	100.0
Total	5	100.0	100.0	

To what degree would you say you are involved in the research program?

**In what way are you involved?**





**Q6. What is your motivation for being involved in the research program?**

**Part of job description**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**To extend my knowledge in my field**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
Valid no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**To interact with researchers and engage in different activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**To provide solutions to technical problems relating to my unit**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

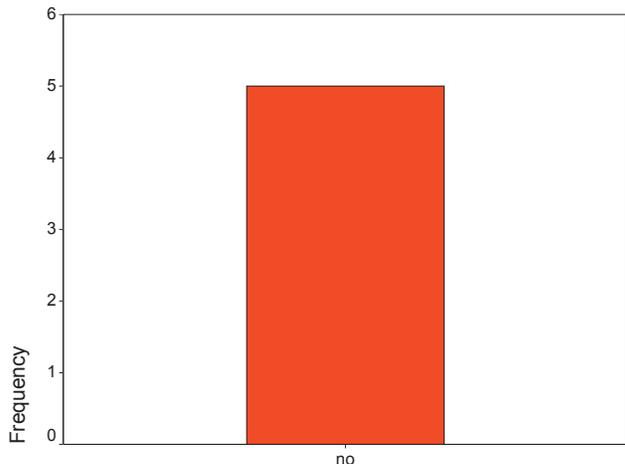
**Other**

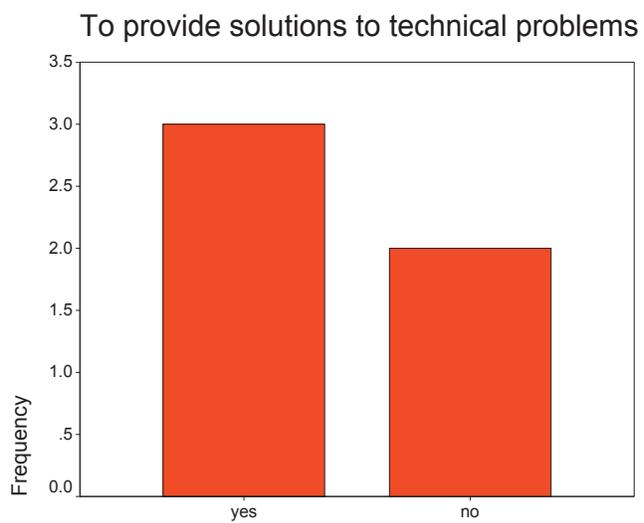
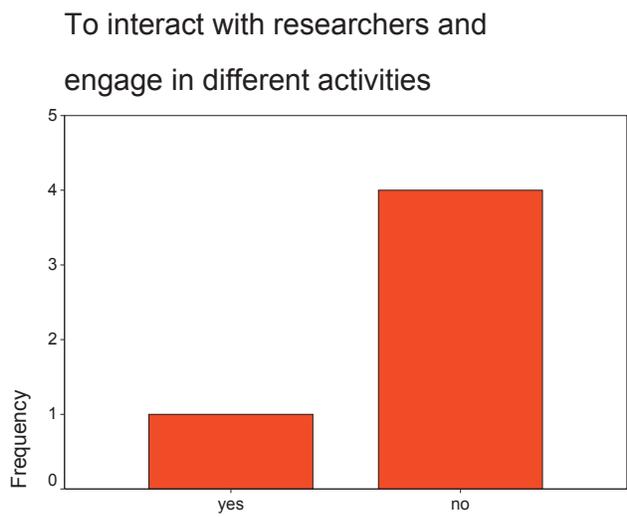
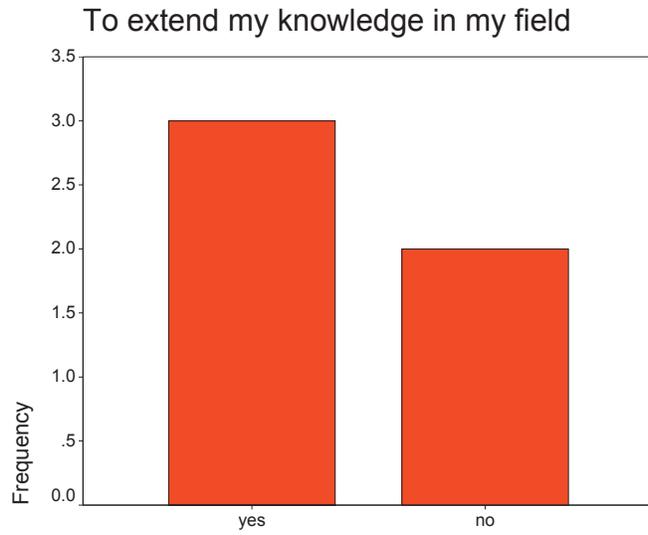
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

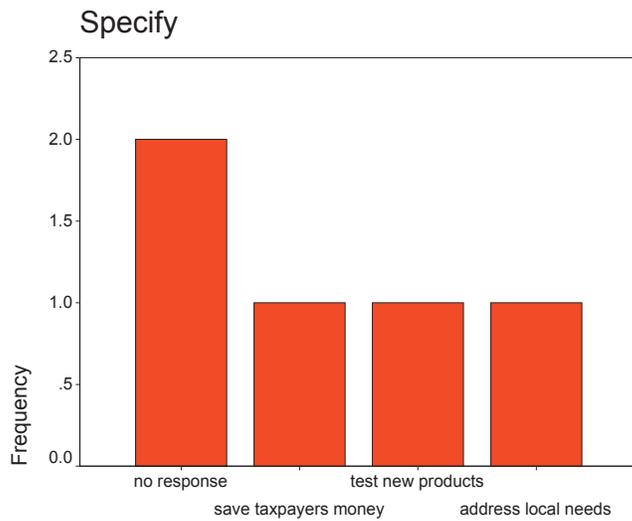
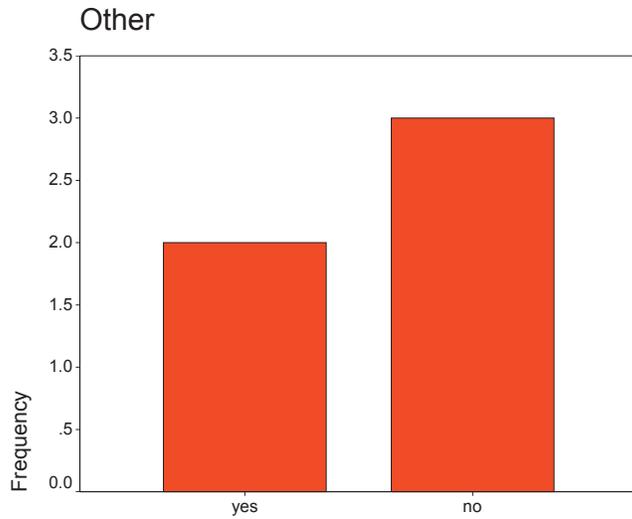
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
Save taxpayers money	1	20.0	20.0	60.0
Test new products, construction methods	1	20.0	20.0	80.0
To assure needs at the local level are included in research, planning and projects underway.	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Part of job description**



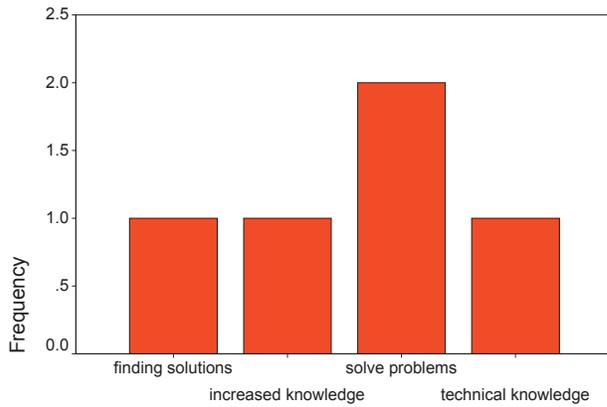




**Q7. What do you like most about being involved in the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid finding solutions to save taxpayers money	1	20.0	20.0	20.0
increased knowledge	1	20.0	20.0	40.0
solve technical problems	2	40.0	40.0	80.0
Technical knowledge, Implementation ideas	1	20.0	20.0	100.0
Total	5	100.0	100.0	

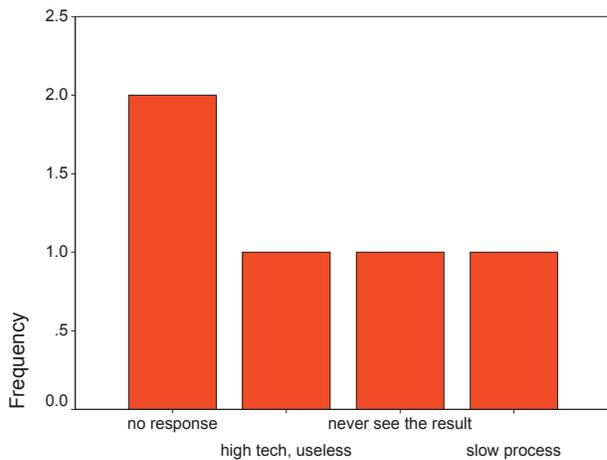
What do you like most about being involved?



Q8. What do you like least?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
high tech, useless products	1	20.0	20.0	60.0
never see the link between research and the way ODOT does business	1	20.0	20.0	80.0
slow process to implement and get long-term results, conclusions	1	20.0	20.0	100.0
Total	5	100.0	100.0	

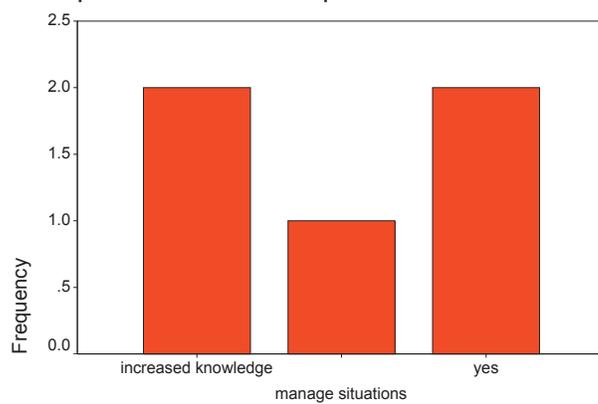
What do you like least?



**Q9. How has your involvement enhanced your professional development?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increased knowledge	2	40.0	40.0	40.0
	manage situations and make informed decisions	1	20.0	20.0	60.0
	yes	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

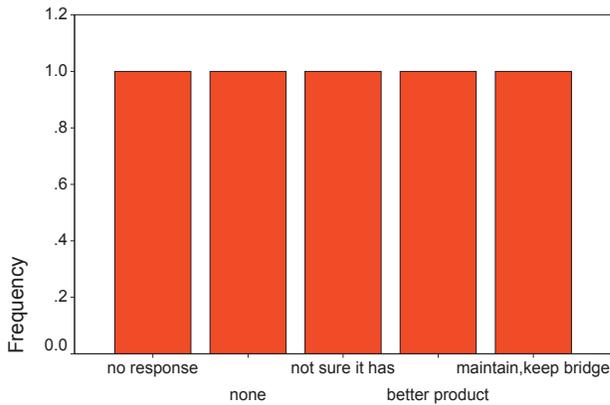
How has your involvement enhanced your professional development?



**Q10. How has your involvement improved the efficiency or effectiveness of your job or program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	20.0	20.0	20.0
	none	1	20.0	20.0	40.0
	not sure it has providing better product	1	20.0	20.0	60.0
	yes. maintain and keep a bridge open to traffic when concerns were raised. perform testing and determine bridge could remain in service	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

How has your involvement improved the efficiency of your job or program?



**Q11. Regardless of your level of involvement, please rate the following activities you expect from the research program.**

**To solve problems for constituents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	20.0	20.0	20.0
somewhat priority	2	40.0	40.0	60.0
high priority	1	20.0	20.0	80.0
very high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	3	60.0	60.0	60.0
somewhat priority	1	20.0	20.0	80.0
high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	20.0	20.0	20.0
somewhat priority	1	20.0	20.0	40.0
high priority	1	20.0	20.0	60.0
very high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	3	60.0	60.0	60.0
very high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	2	40.0	40.0	40.0
very high priority	3	60.0	60.0	100.0
Total	5	100.0	100.0	

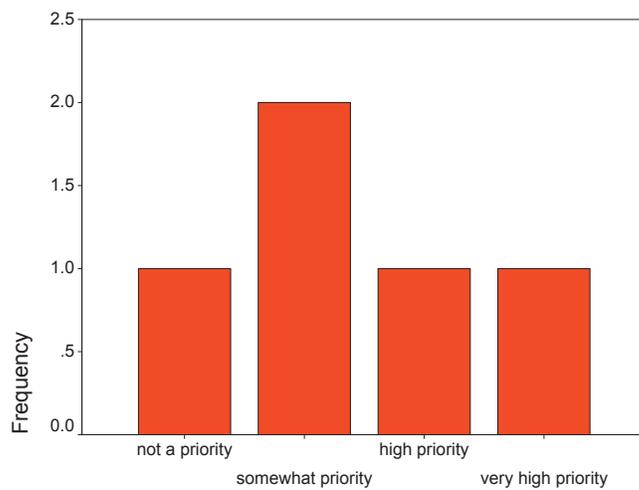
**Other**

	Frequency	Percent
Missing System	5	100.0

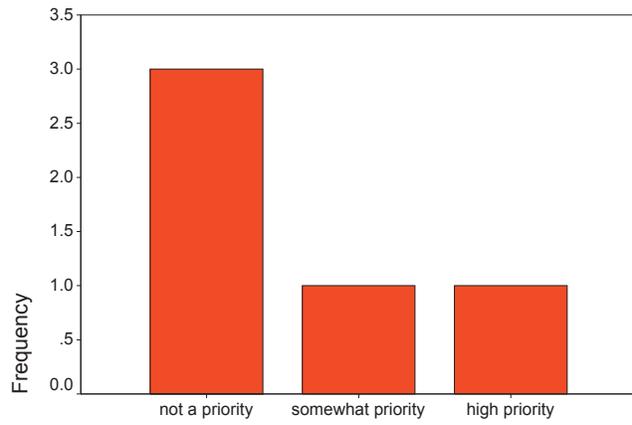
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
find products to stretch resources	1	20.0	20.0	100.0
Total	5	100.0	100.0	

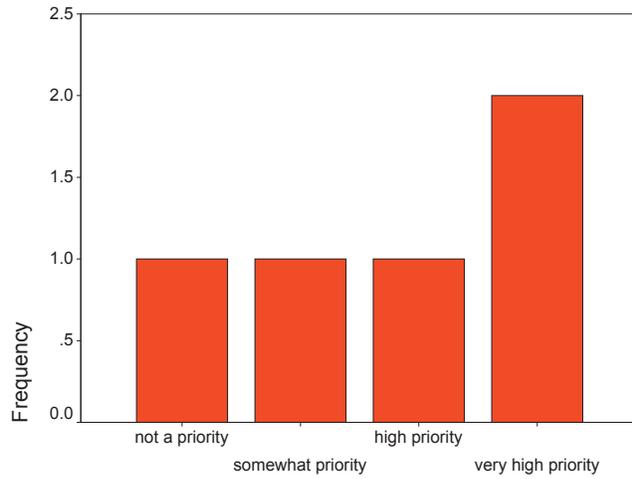
**To solve problems for constituents**



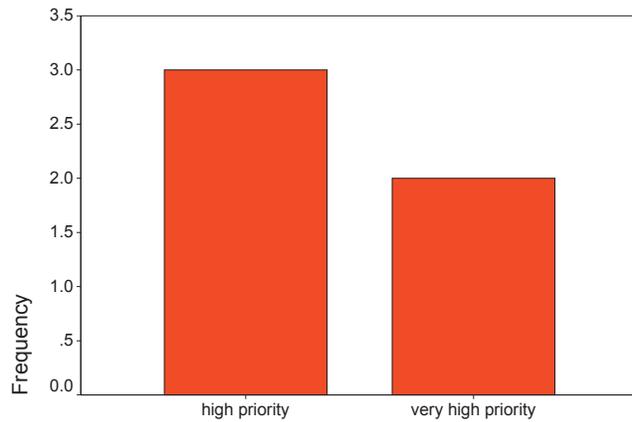
### To attain national recognition for Ohio and ODOT



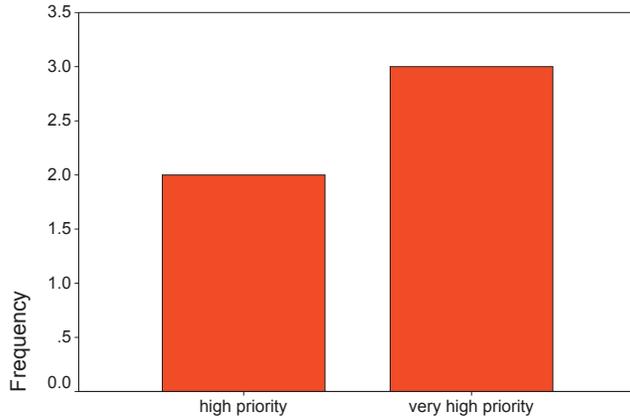
### To serve as a technical resource



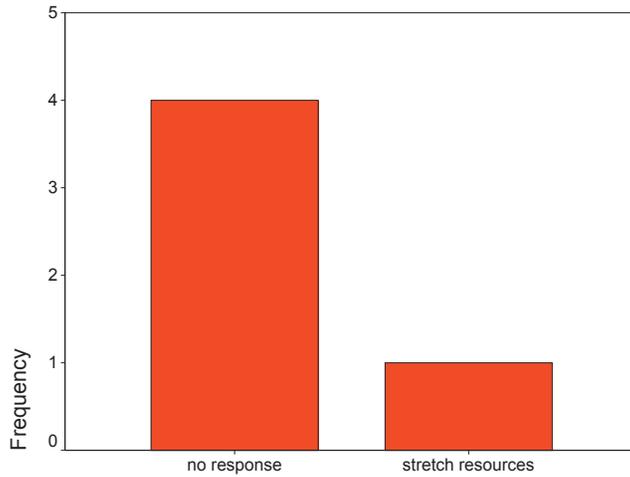
### To seek out or propose ways to improve ODOT activities



To compile best practices from peers and other organizations and share



Specify



**Q12. Please rate the following ODOT research program stake holders according to level of priority.**

**Research community**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat priority	1	20.0	20.0	20.0
high priority	3	60.0	60.0	80.0
very high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**ODOT engineers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat priority	1	20.0	20.0	20.0
high priority	2	40.0	40.0	60.0
very high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**ODOT managers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat priority	1	20.0	20.0	20.0
high priority	3	60.0	60.0	80.0
very high priority	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**The traveling public**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	20.0	20.0	20.0
somewhat priority	2	40.0	40.0	60.0
very high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Other DOTs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	2	40.0	40.0	40.0
somewhat priority	1	20.0	20.0	60.0
high priority	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Particular unit(s) or division(s) within ODOT**

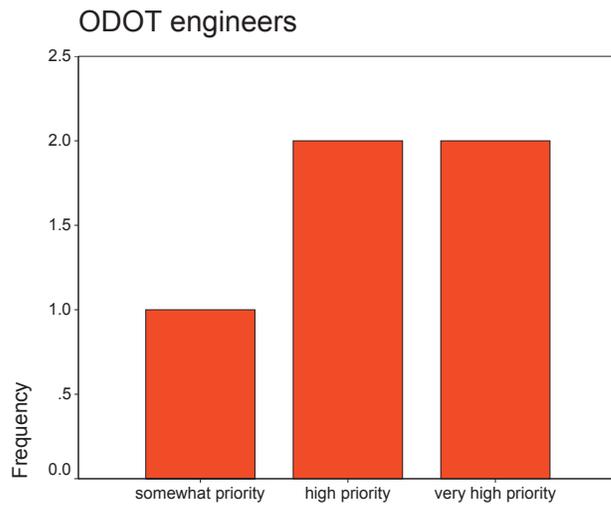
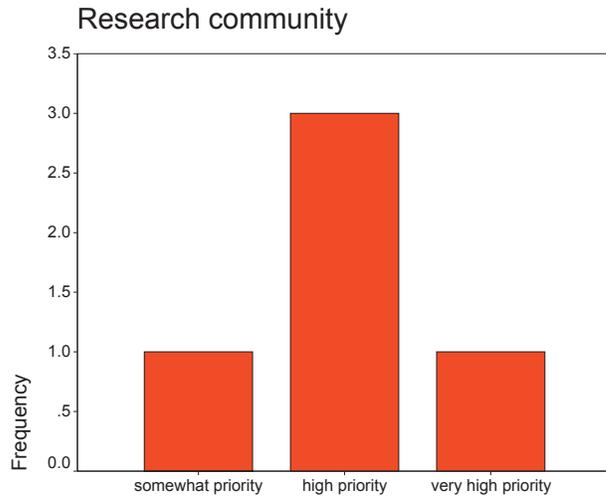
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	2	40.0	66.7	66.7
very high priority	1	20.0	33.3	100.0
Total	3	60.0	100.0	
Missing System	2	40.0		
Total	5	100.0		

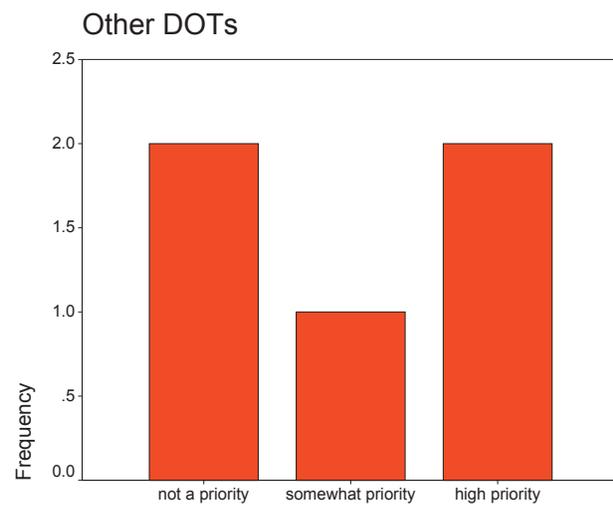
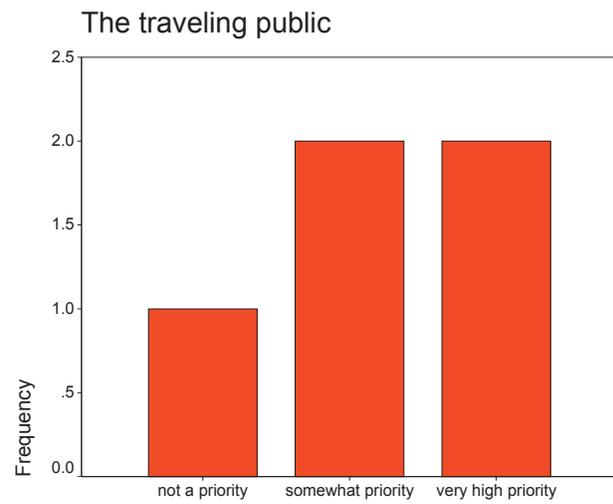
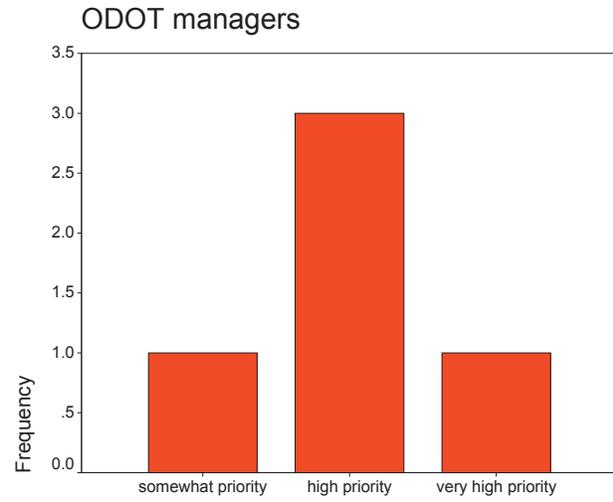
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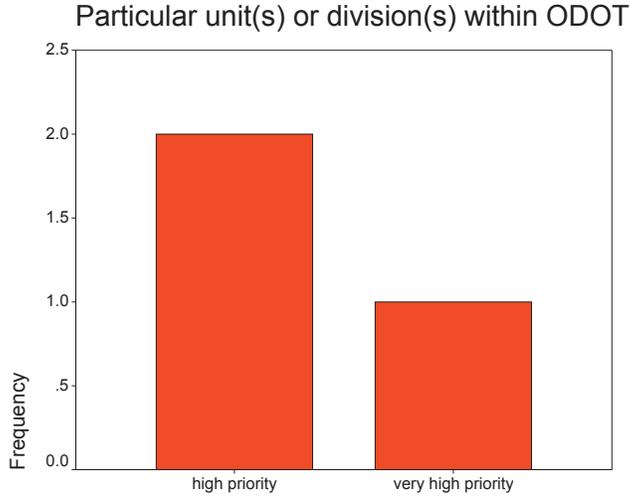
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

Others

	Frequency	Percent
Missing System	5	100.0



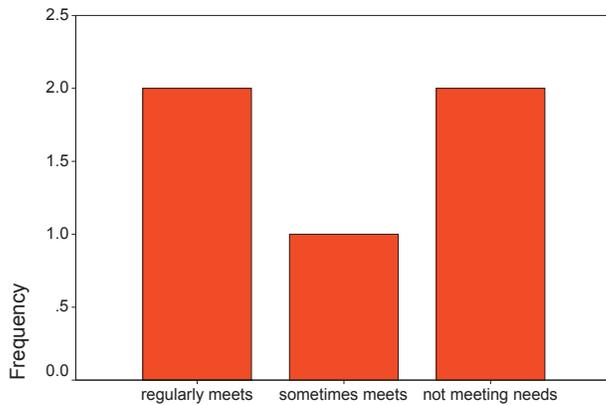




**Q13. Which of the following statements best describes the extent to which your expectations are being met?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Research regularly meets my/my department's expectations	2	40.0	40.0	40.0
	Research sometimes meets my/my department's expectations	1	20.0	20.0	60.0
	Research is off on its own, doing its own thing and is not meeting expectations	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

Which of the following best describes how the research program meets your needs?



**Q14. How do you learn of research program activities?****Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Internet or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
past projects	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Other**

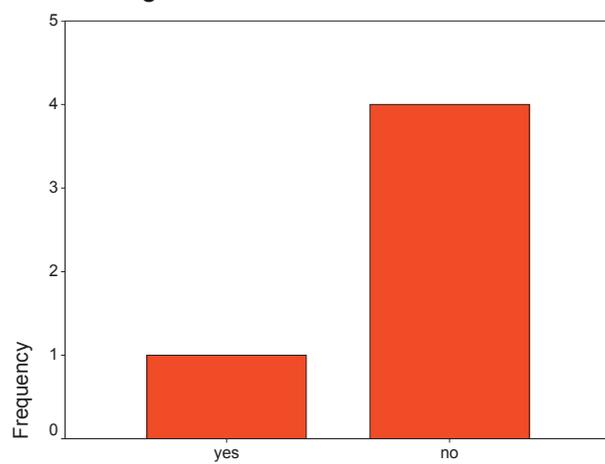
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Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Specify**

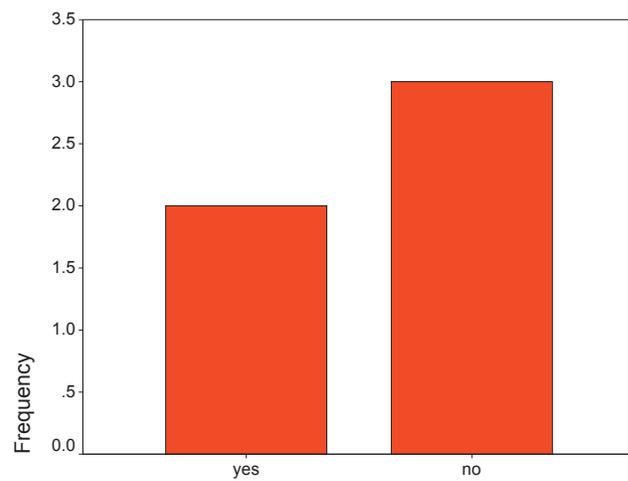
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	40.0	40.0	40.0
I am involved with the management of the program	1	20.0	20.0	60.0
tech. magazines	1	20.0	20.0	80.0
when research reports are circulated	1	20.0	20.0	100.0
Total	5	100.0	100.0	



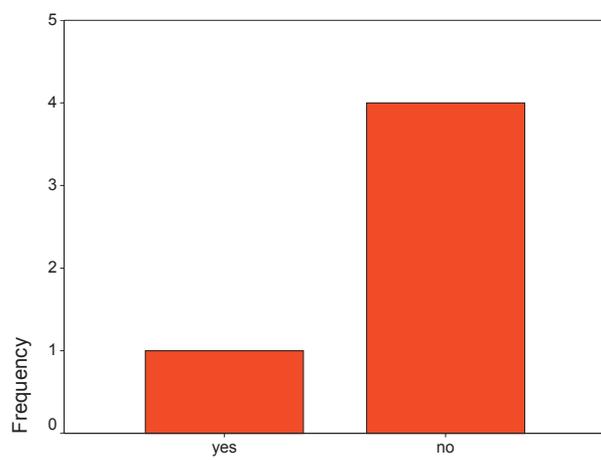
Moving Forward research newsletter

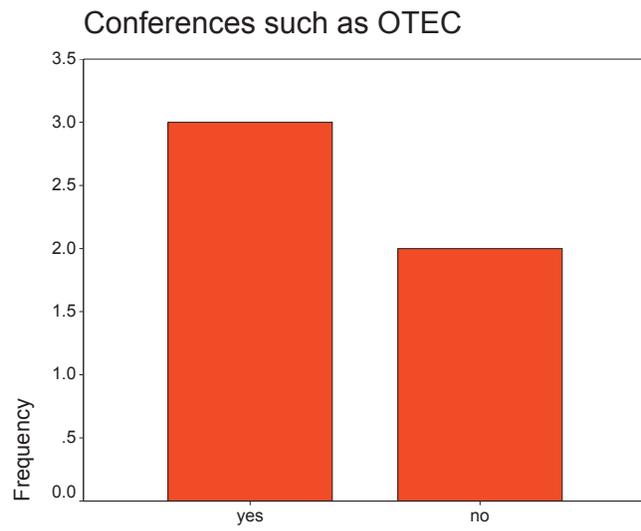
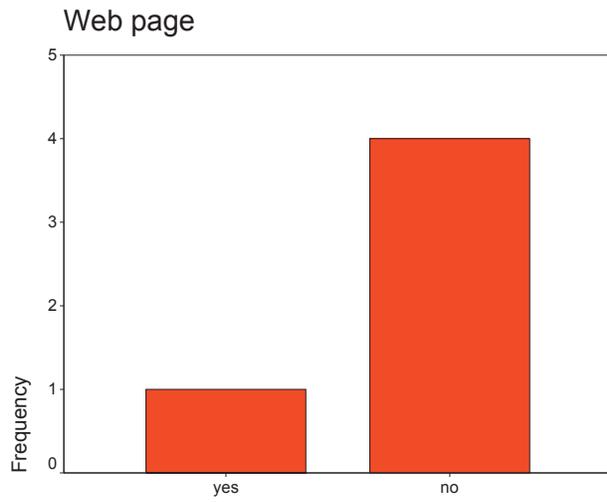
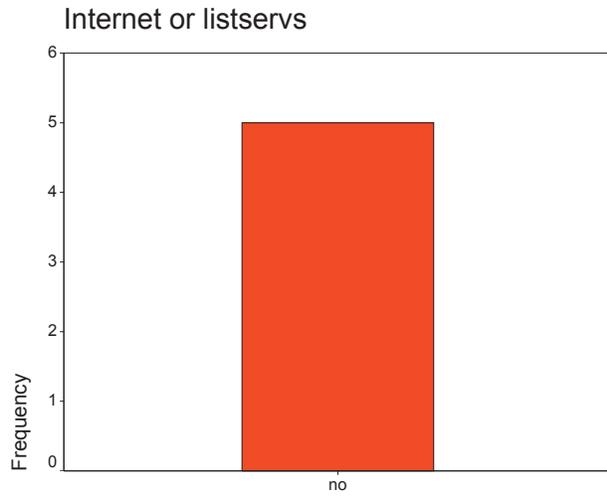


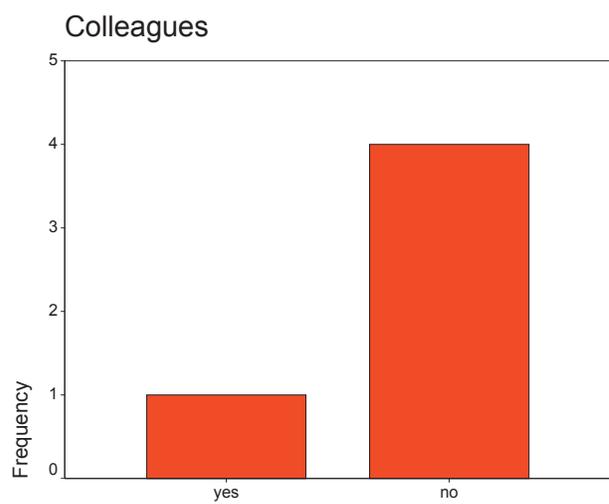
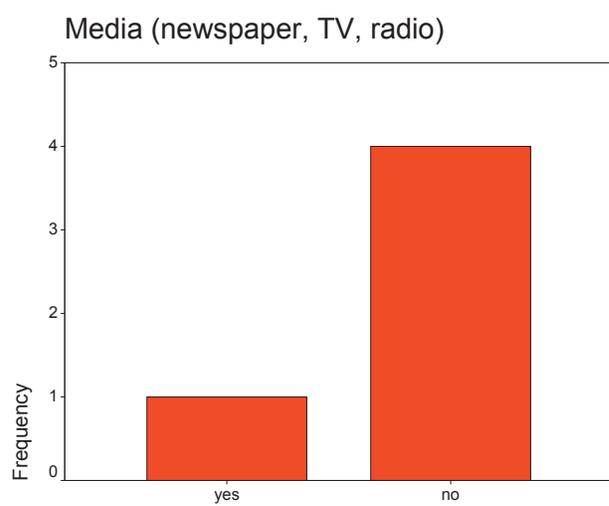
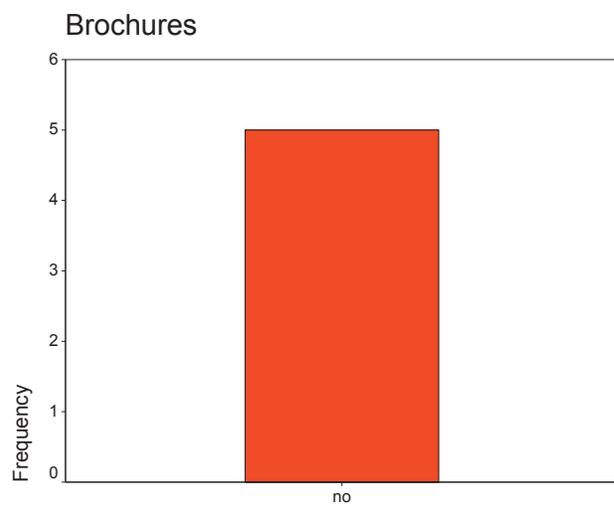
IOCs / Letters

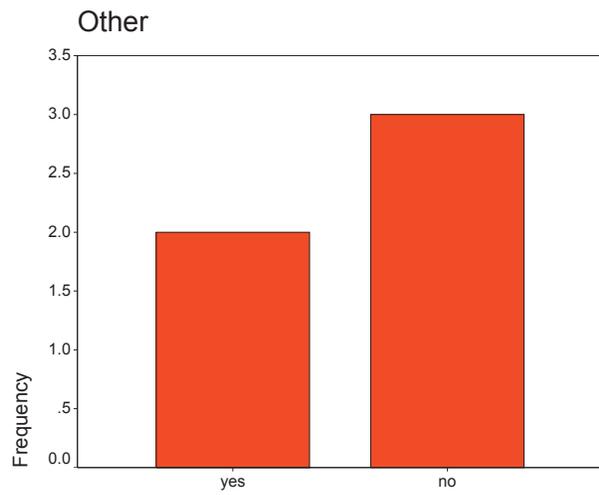
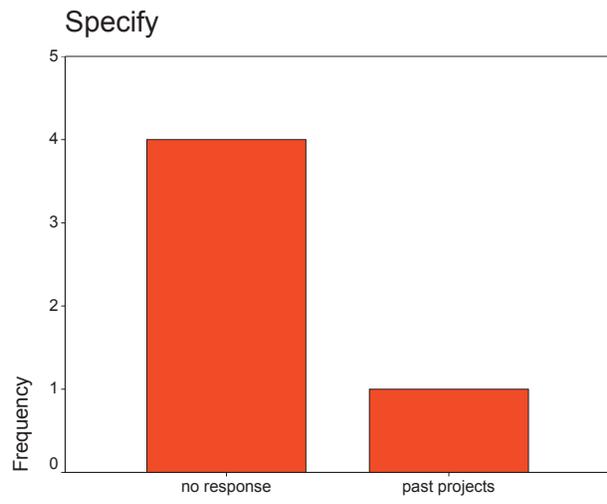
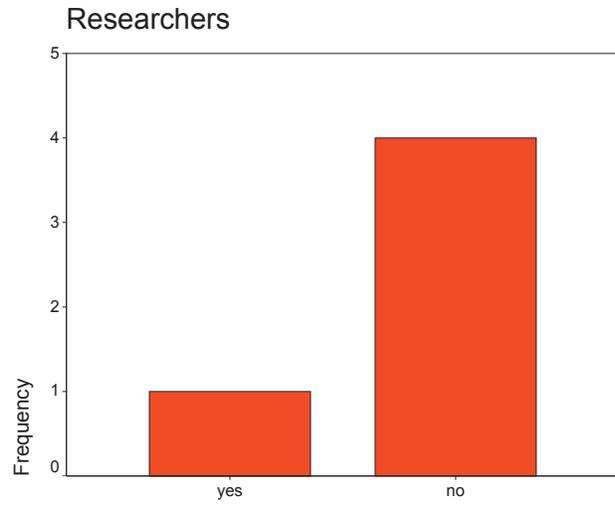


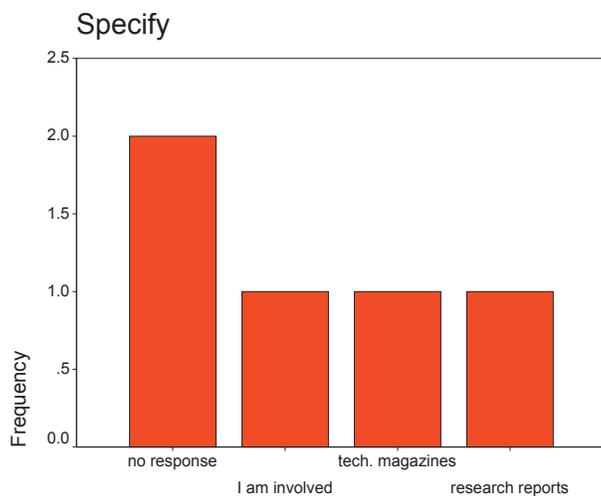
Intranet or e-mail





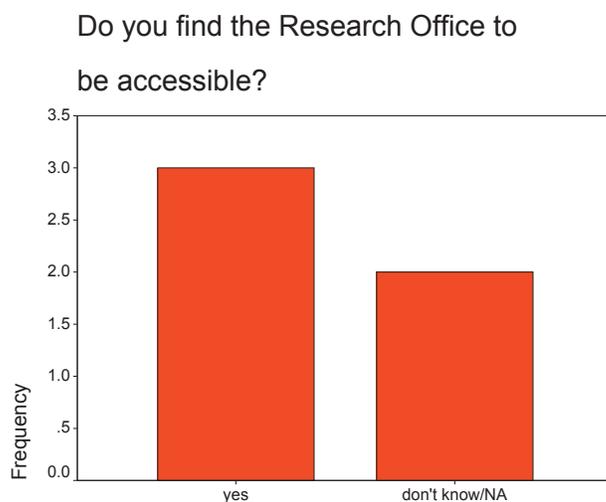






**Q15. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
don't know/not applicable	2	40.0	40.0	100.0
Total	5	100.0	100.0	



**Q16. Are you aware of any research program activities that resulted in the following?**

**Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Safety improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	80.0	80.0	80.0
bridge monitoring	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Quality improvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid superpave	3	60.0	60.0	60.0
Total	2	40.0	40.0	100.0
	5	100.0	100.0	

**Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Specify**

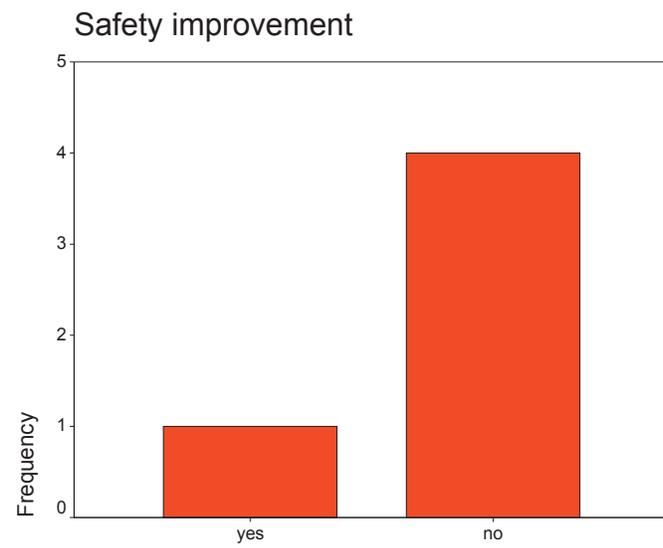
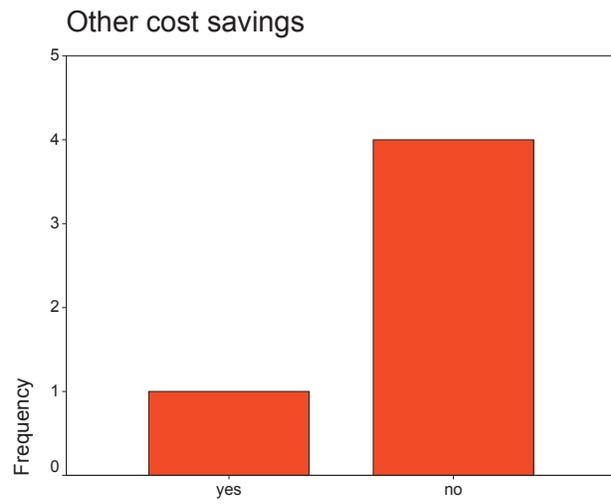
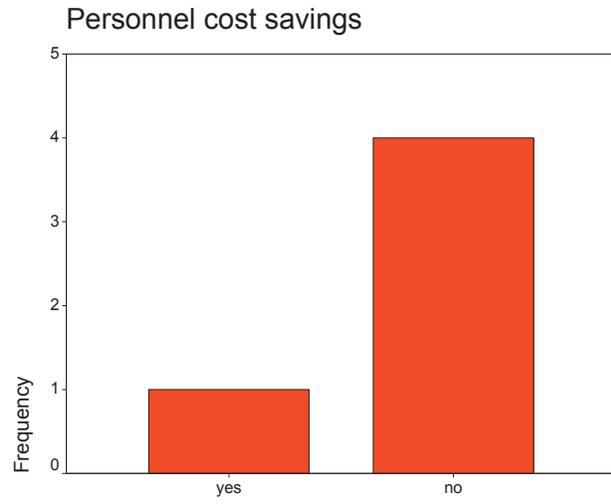
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

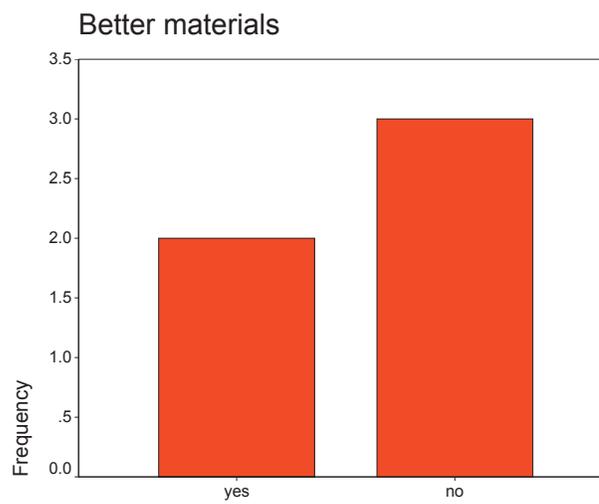
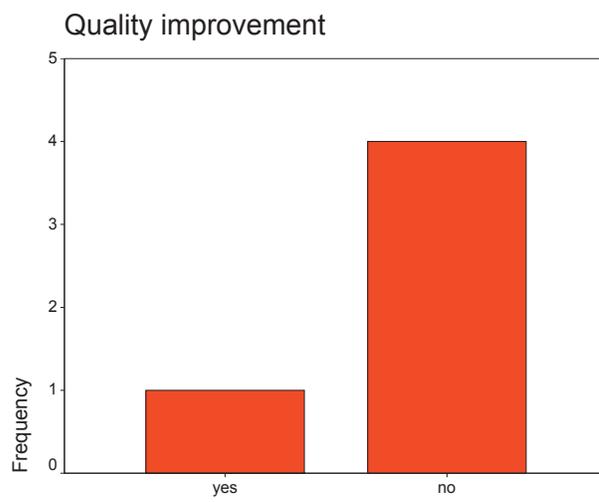
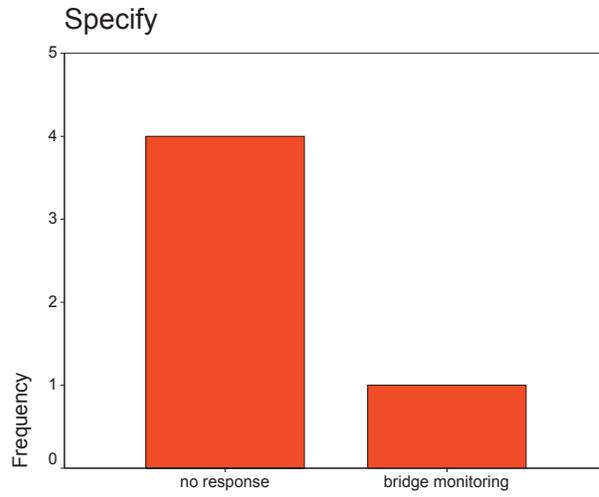
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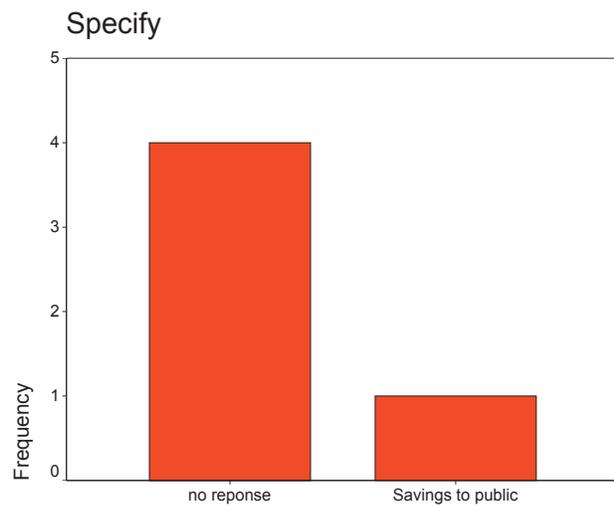
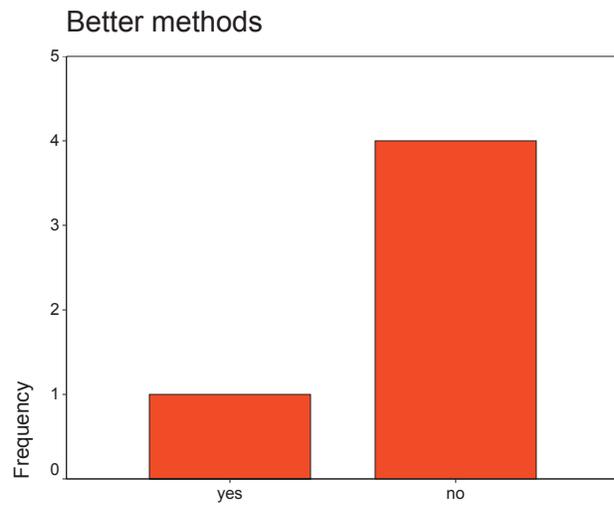
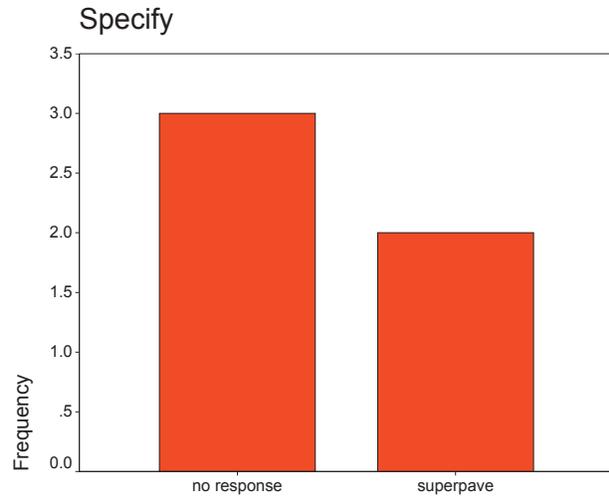
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Savings to the motoring public with the bridge design project to expedite construction.	4	80.0	80.0	80.0
Total	1	20.0	20.0	100.0
	5	100.0	100.0	







**Q17. Have you heard of any of the following specific research projects?****SHRP pavement project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	100.0	100.0	100.0

**Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

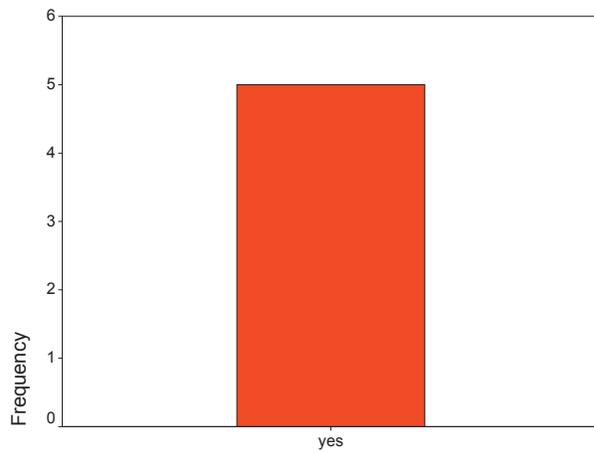
**Innovative Bridge Design Construction Techniques to Expedite Construction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

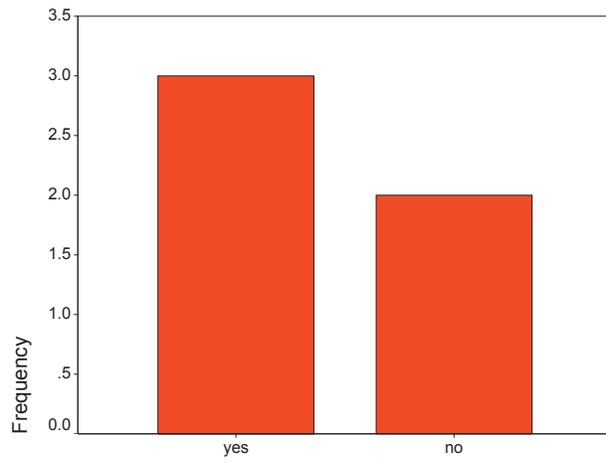
**Comparison and Definition of State DOT Practices in Selection of Pavement Materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

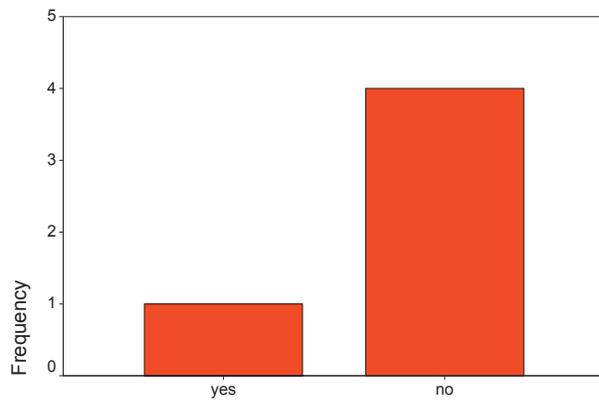
SHRP pavement project on Delaware 23



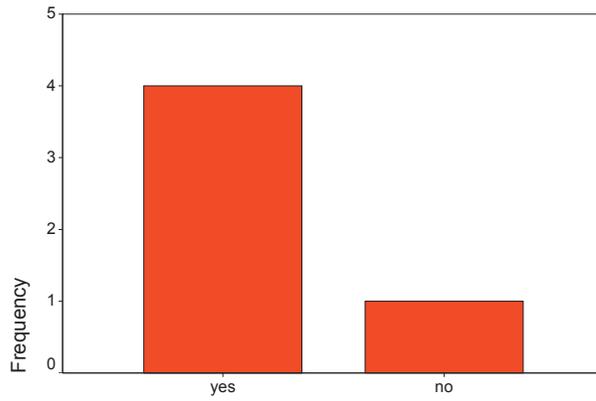
Ohio Freight Study



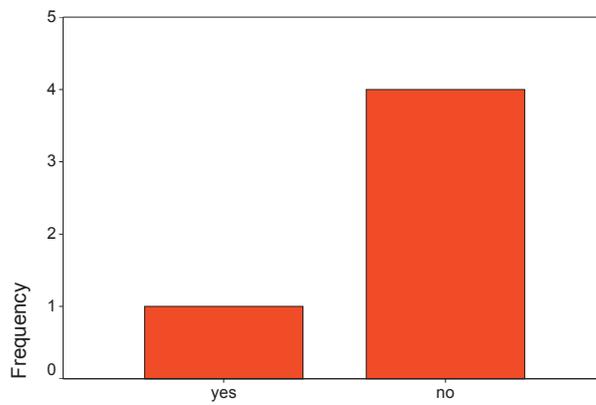
Evaluation of Warranty Provisions on ODOT Construction Projects



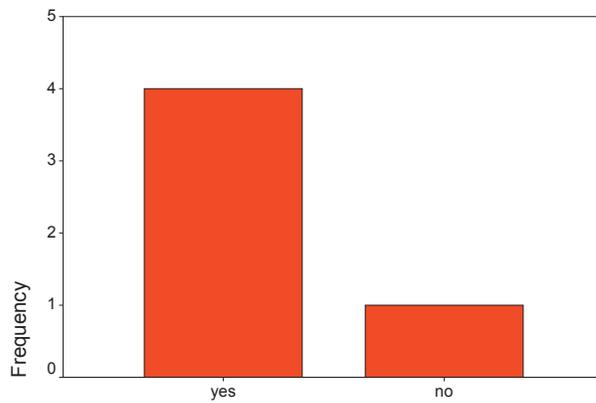
### Evaluation of Drainable Bases Under Asphalt Pavement



### Development of Crash Reduction Techniques

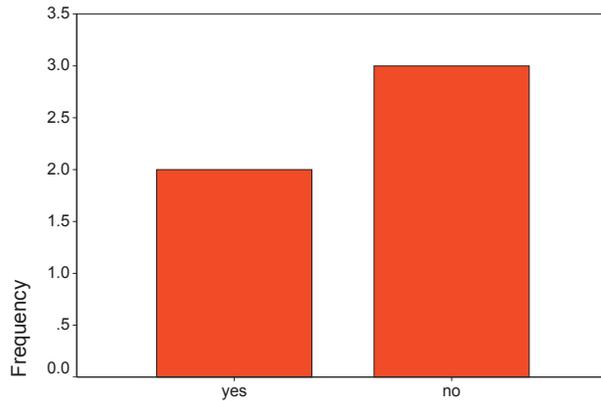


### Innovative Bridge Design Construction Techniques to Expedite Construction



## Comparison and Definition of State DOT

## Practices in Selection of Pavement Material



## Q17A. If so, how did you hear of them?

## Transcript newsletter

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

## Moving Forward research newsletter

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

## Memoranda / Letters

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

## Intranet or e-mail

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

## Internet or listservs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid OTEC	4	80.0	80.0	80.0
Total	5	100.0	100.0	100.0

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

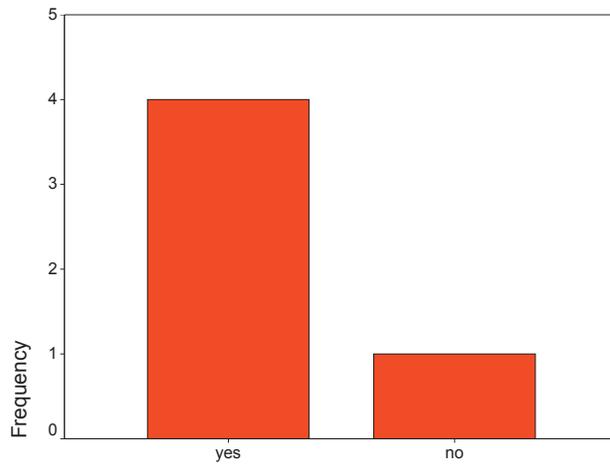
**Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

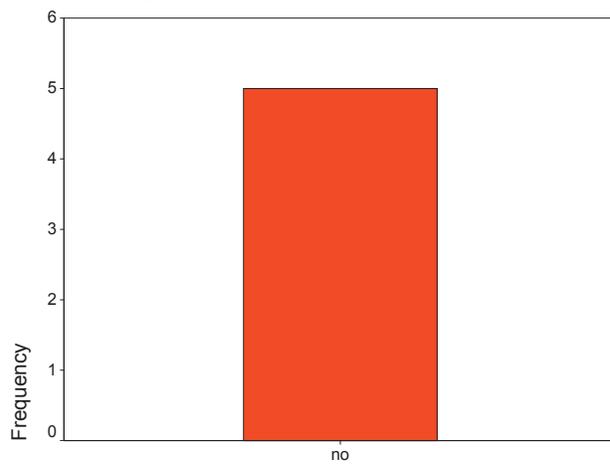
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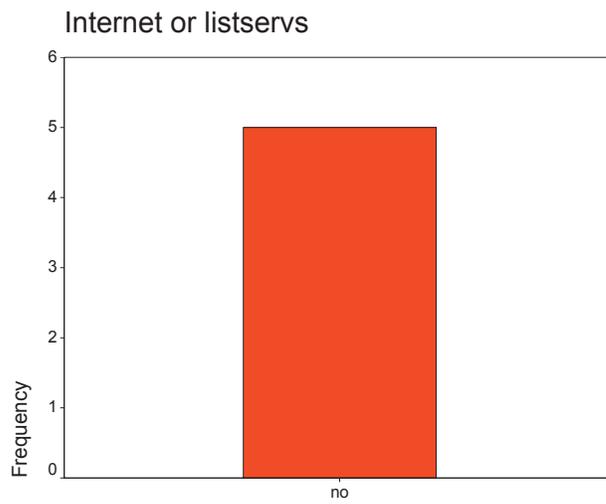
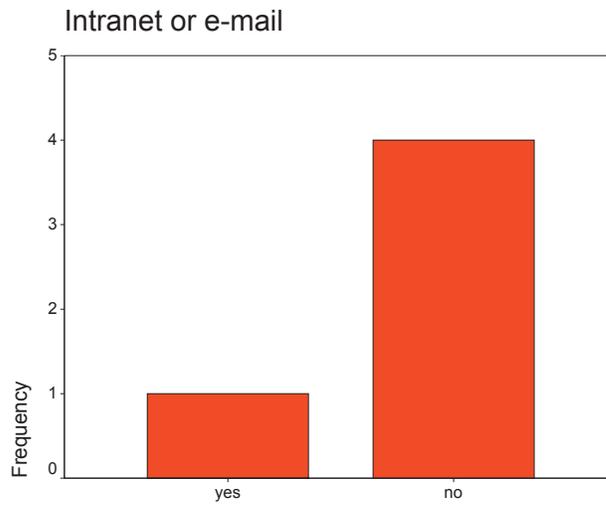
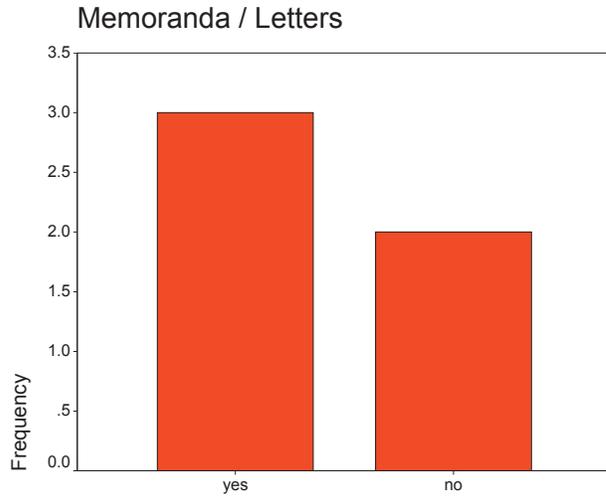
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
construction of SHRP	1	20.0	20.0	80.0
Word of mouth	1	20.0	20.0	100.0
Total	5	100.0	100.0	

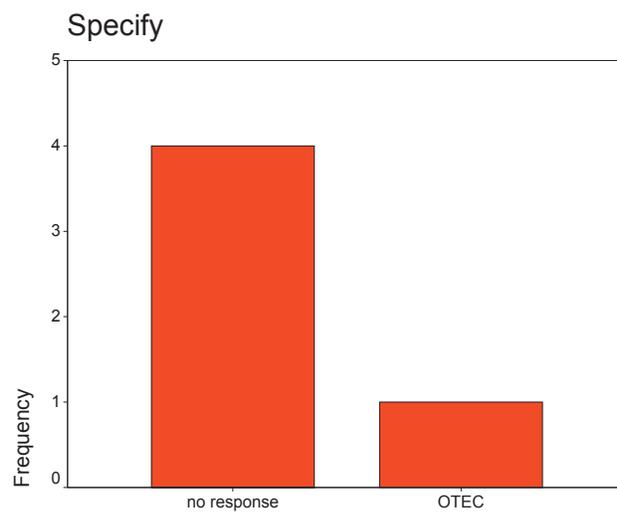
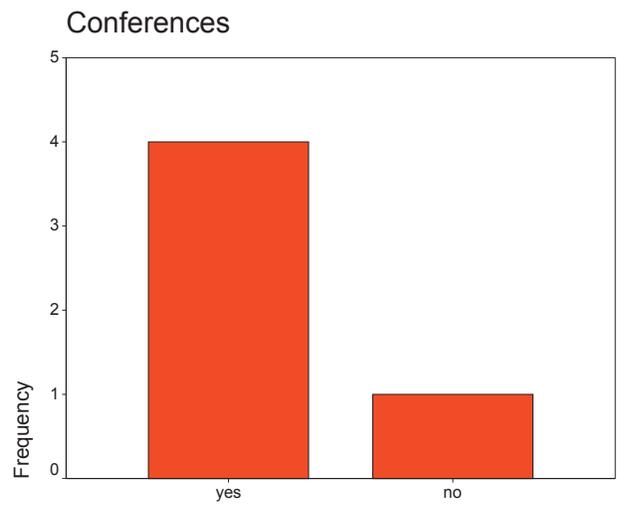
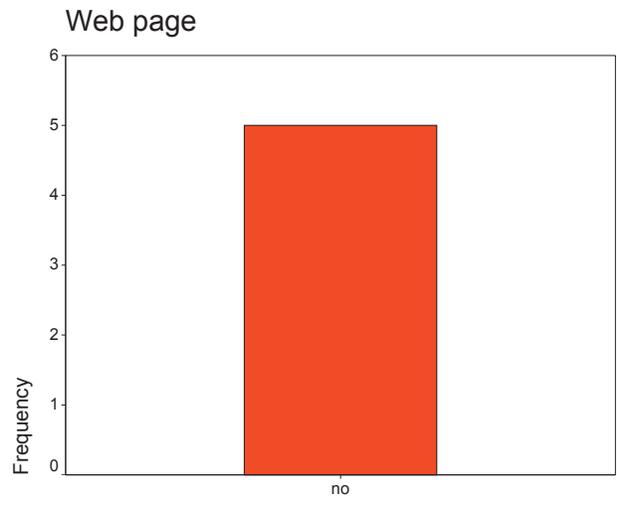
Transcript newsletter

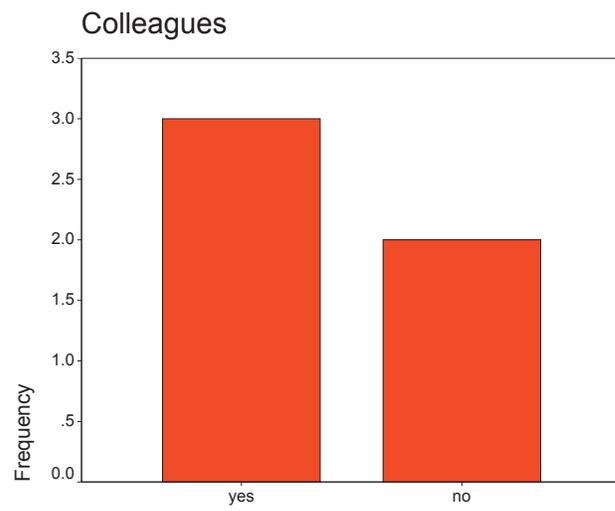
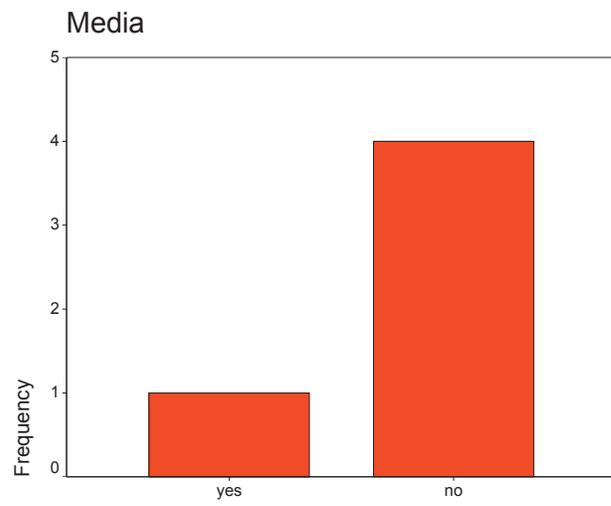
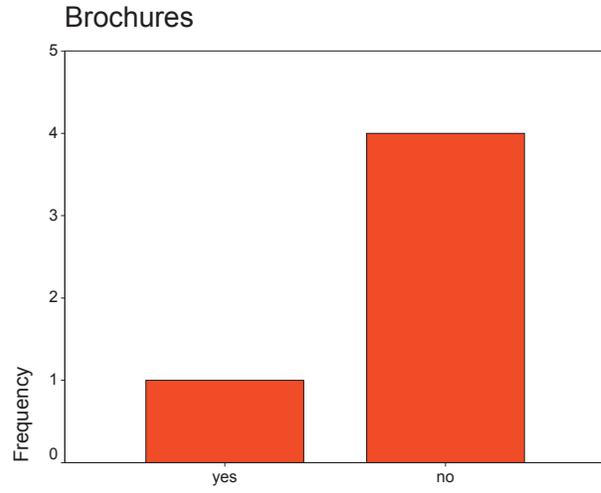


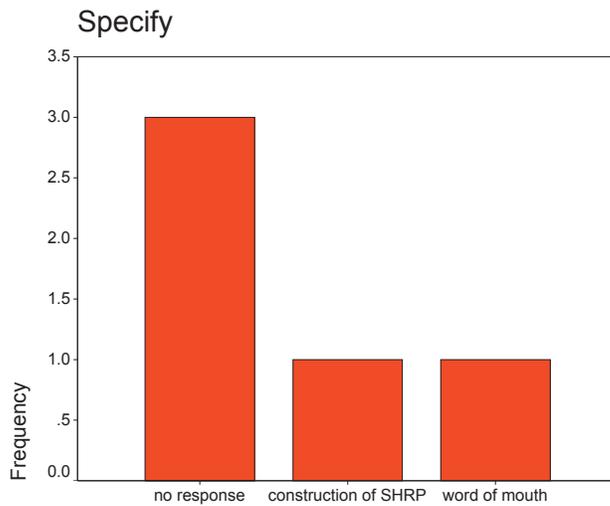
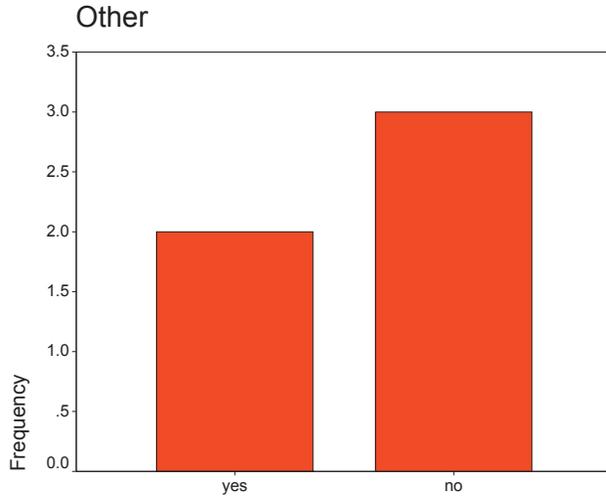
Moving Forward research newsletter











**Q18. What kinds of limitations, if any, do you believe the Research Office faces?**

**Inadequate staffing**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	20.0	20.0	20.0
	no	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**Inadequate funding**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	60.0	60.0	60.0
	no	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**Inadequate support from sponsors**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Risk of no payoff**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Political considerations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**No significant limitations**

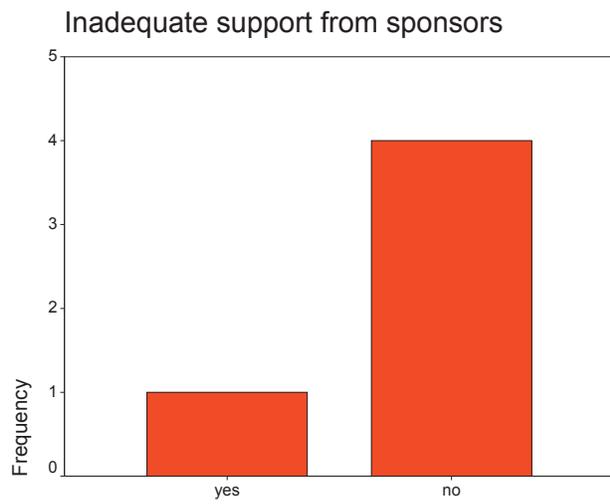
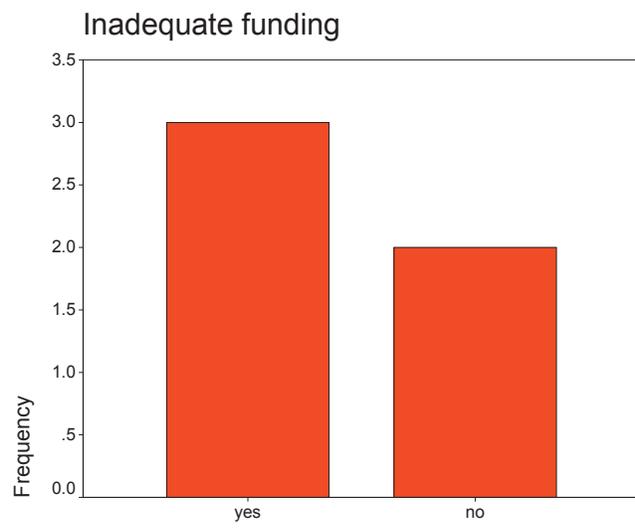
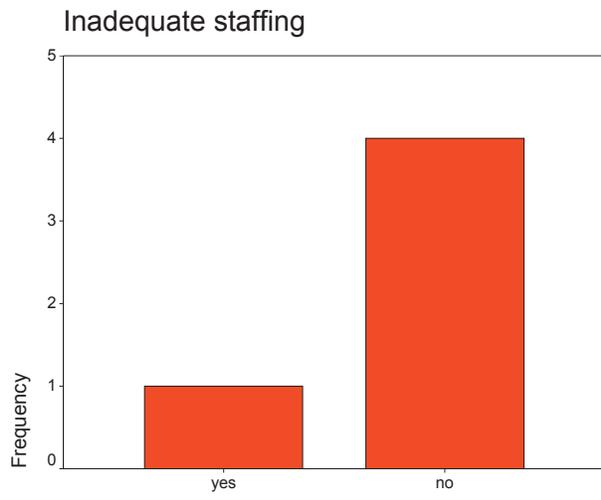
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

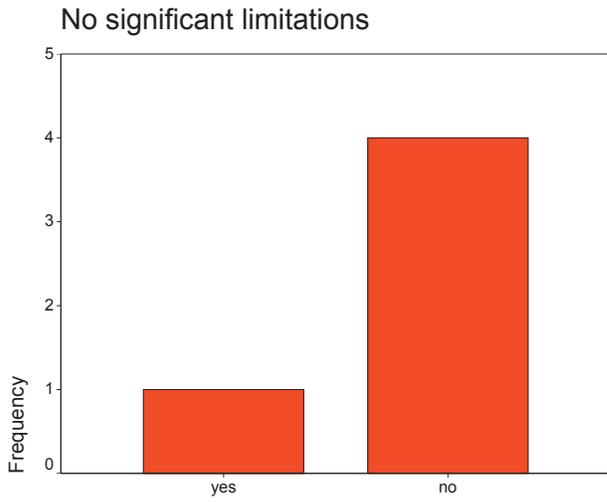
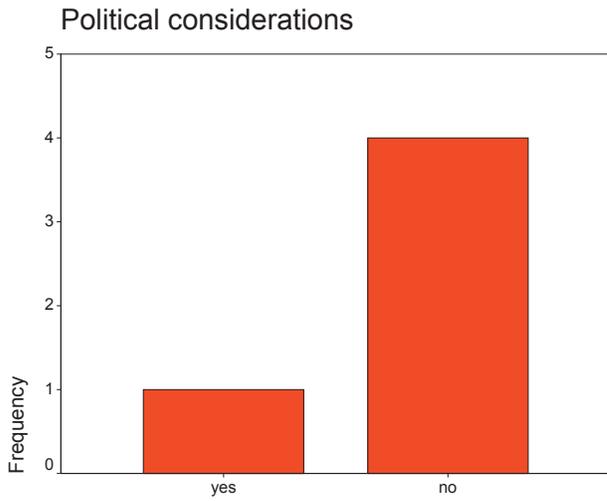
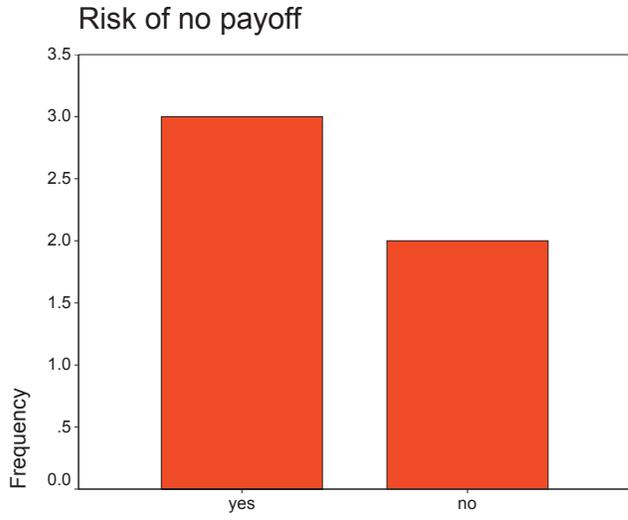
**Other**

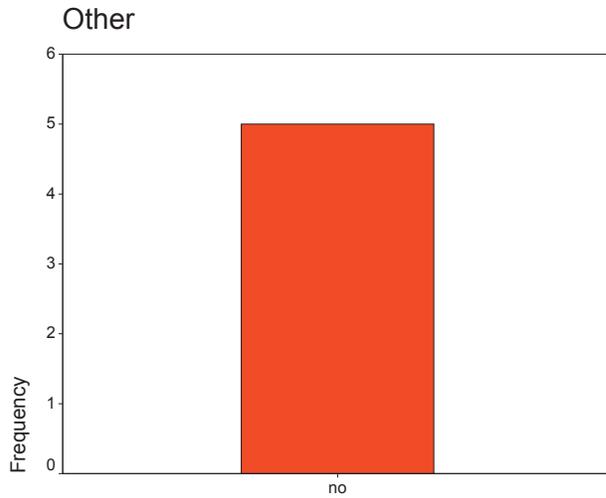
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0







**Q19. What is your preferred source of information?**

**Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Intranet or e-mail**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Colleagues**

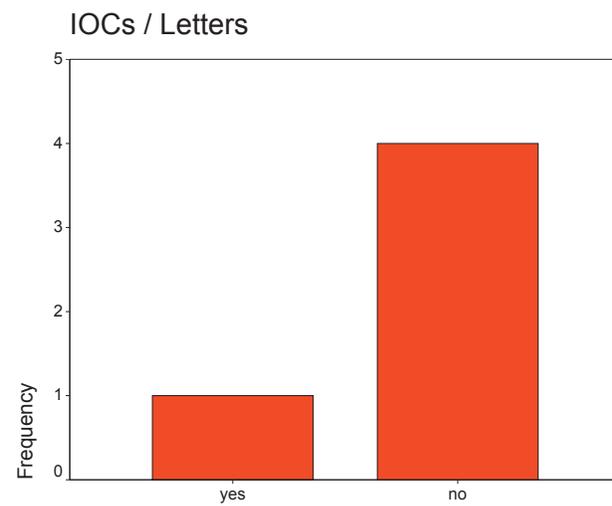
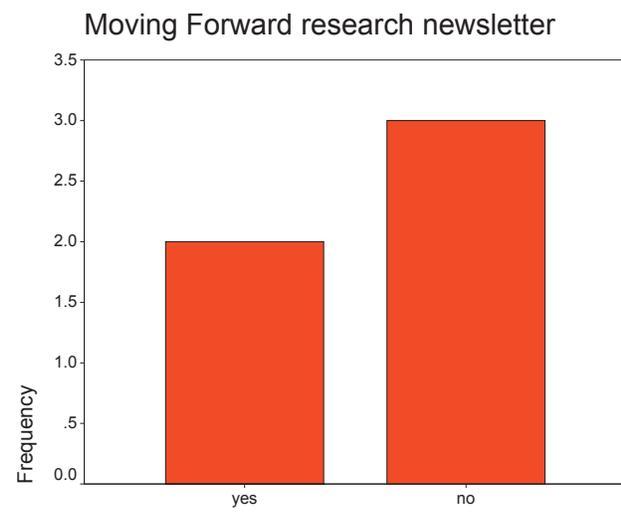
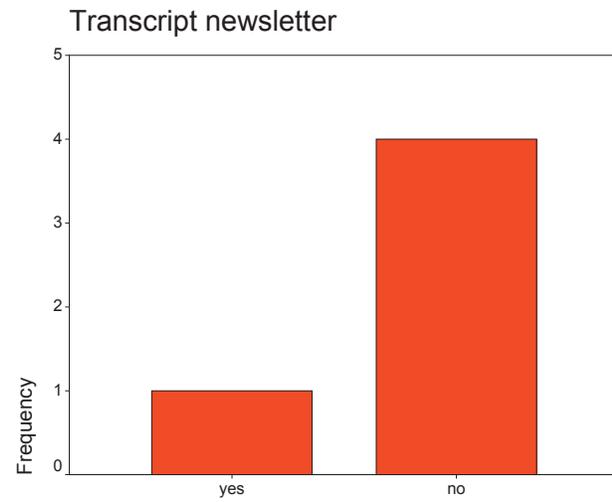
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

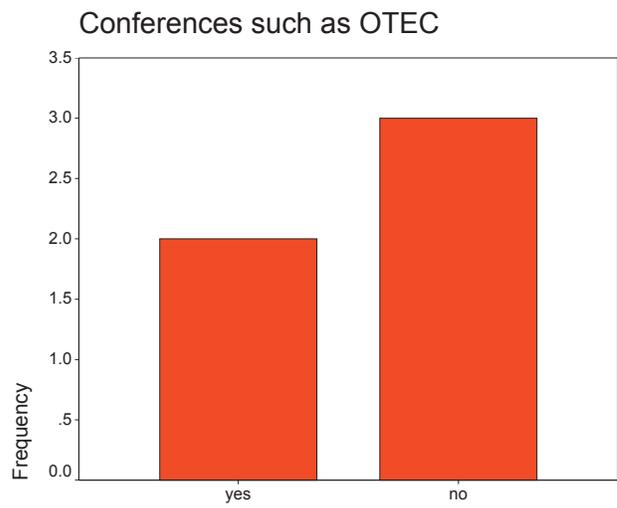
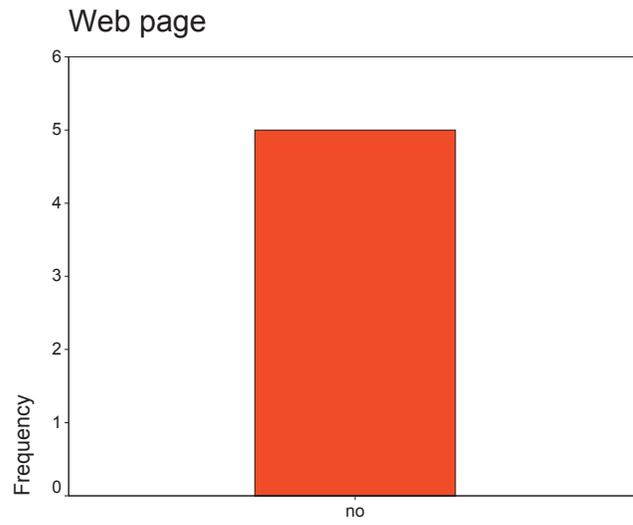
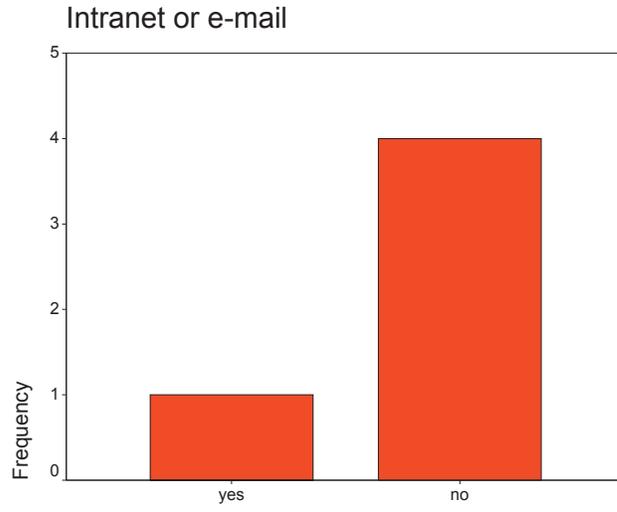
**Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

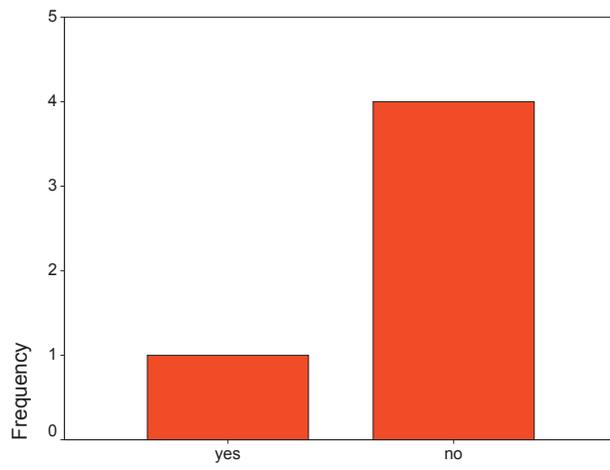
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0

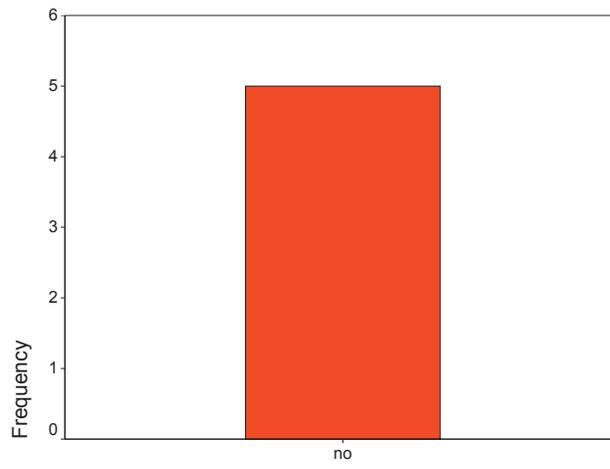




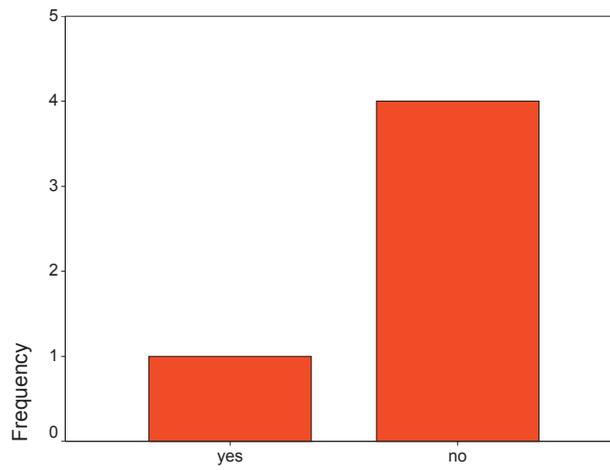
Brochures

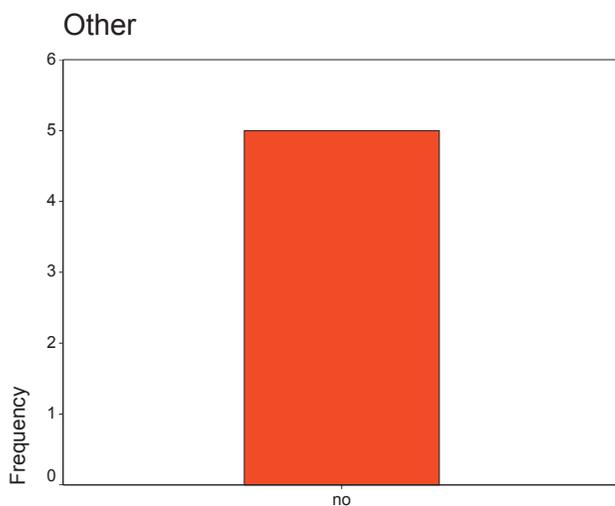


Media (newspaper, TV, radio)



Colleagues

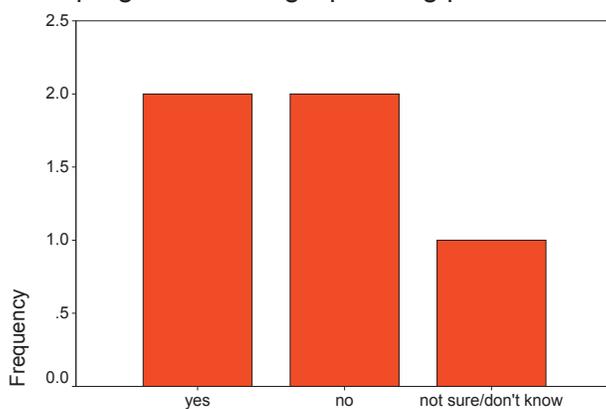




**Q20. Do you feel that you are part of the research program's strategic planning process?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	2	40.0	40.0	80.0
not sure/don't know	1	20.0	20.0	100.0
Total	5	100.0	100.0	

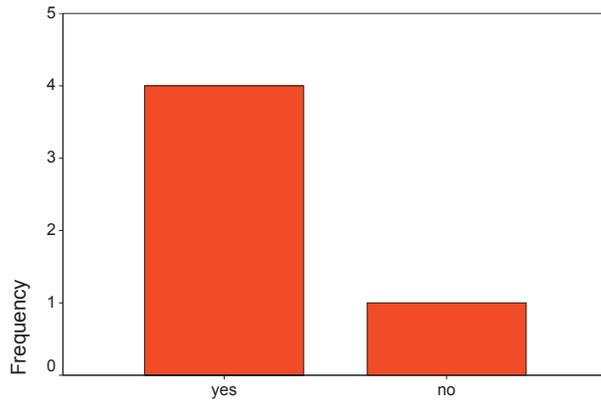
Do you feel you are part of the research program's strategic planning process?



**Q21. Do you feel that you have input into the research program at the project level?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

Do you feel that you have input into the research program at the project level?



**Q22. What types of research activities are you most interested in knowing about?**

**Requests for Proposals**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Ohio's success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	40.0	40.0	40.0
no	3	60.0	60.0	100.0
Total	5	100.0	100.0	

**Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	80.0	80.0	80.0
no	1	20.0	20.0	100.0
Total	5	100.0	100.0	

**Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	

**Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

**Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	5	100.0	100.0	100.0

**Strategic research plan**

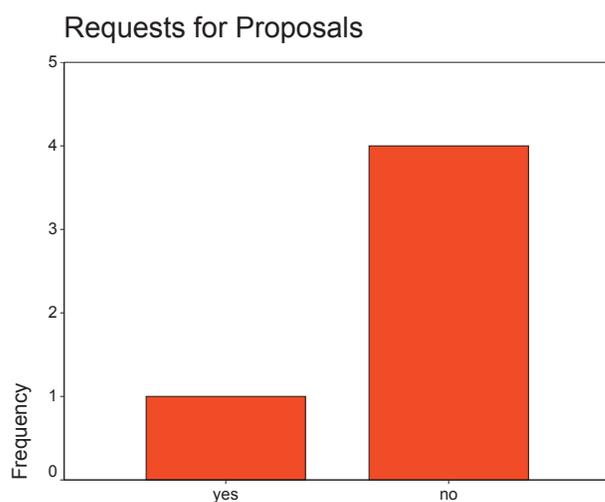
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Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

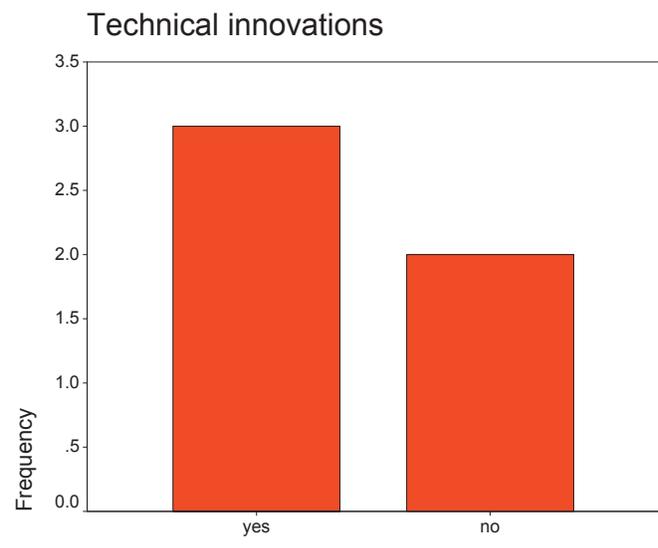
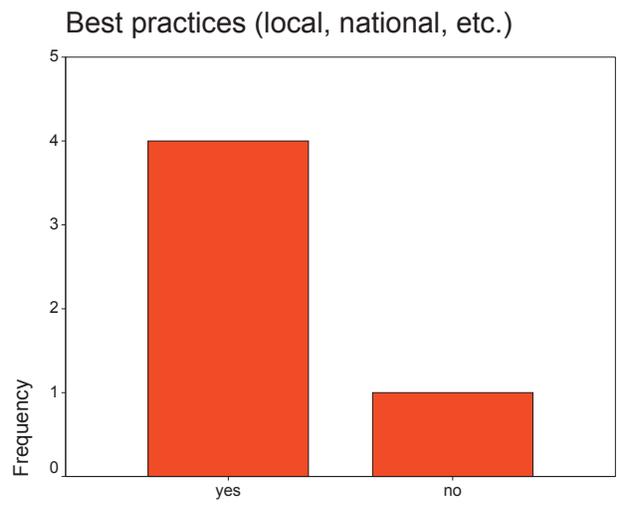
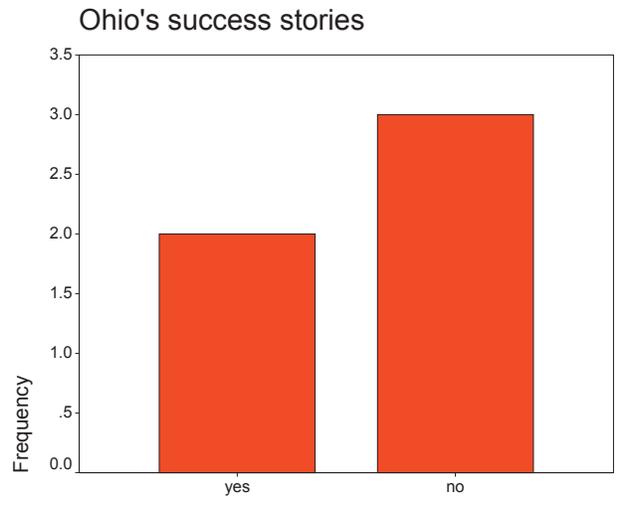
**Training opportunities**

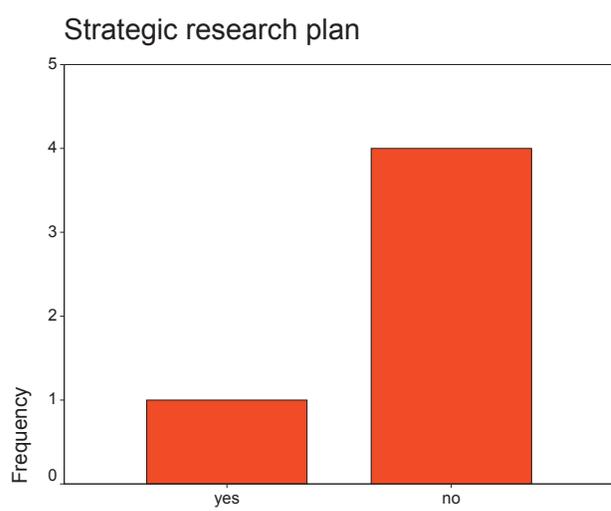
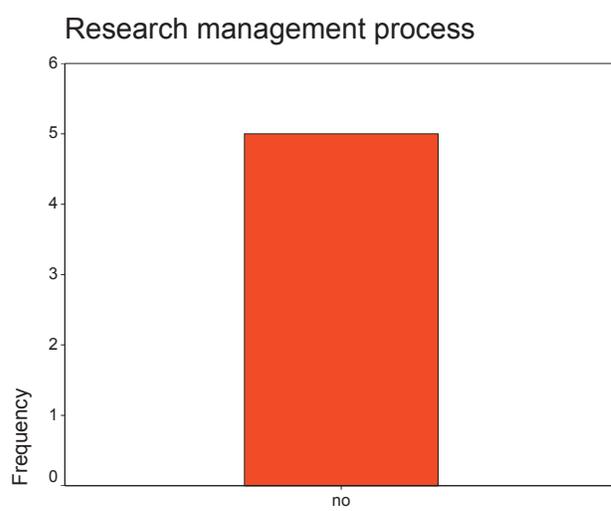
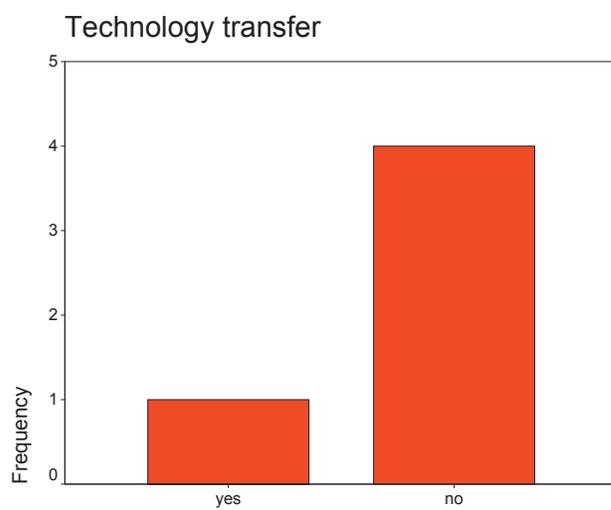
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	20.0	20.0	20.0
no	4	80.0	80.0	100.0
Total	5	100.0	100.0	

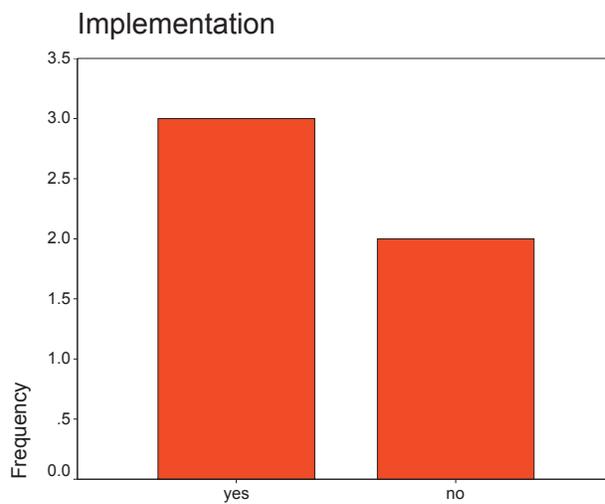
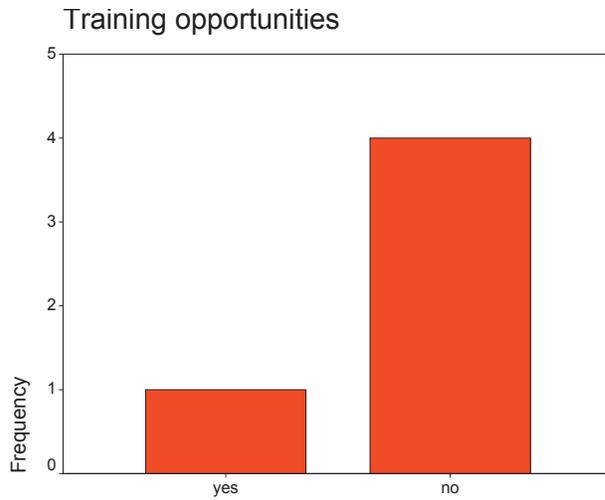
**Implementation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	60.0	60.0	60.0
no	2	40.0	40.0	100.0
Total	5	100.0	100.0	









**Q23: Finally, please take a moment to consider and then list any internal (to ODOT) or external associates who might take an interest in or value the products of the research program.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	60.0	60.0	60.0
construction and maintenance fields	1	20.0	20.0	80.0
production, construction, public info offices, contractors, suppliers, schools	1	20.0	20.0	100.0
Total	5	100.0	100.0	



# Communication Strategies for State Transportation Research Programs

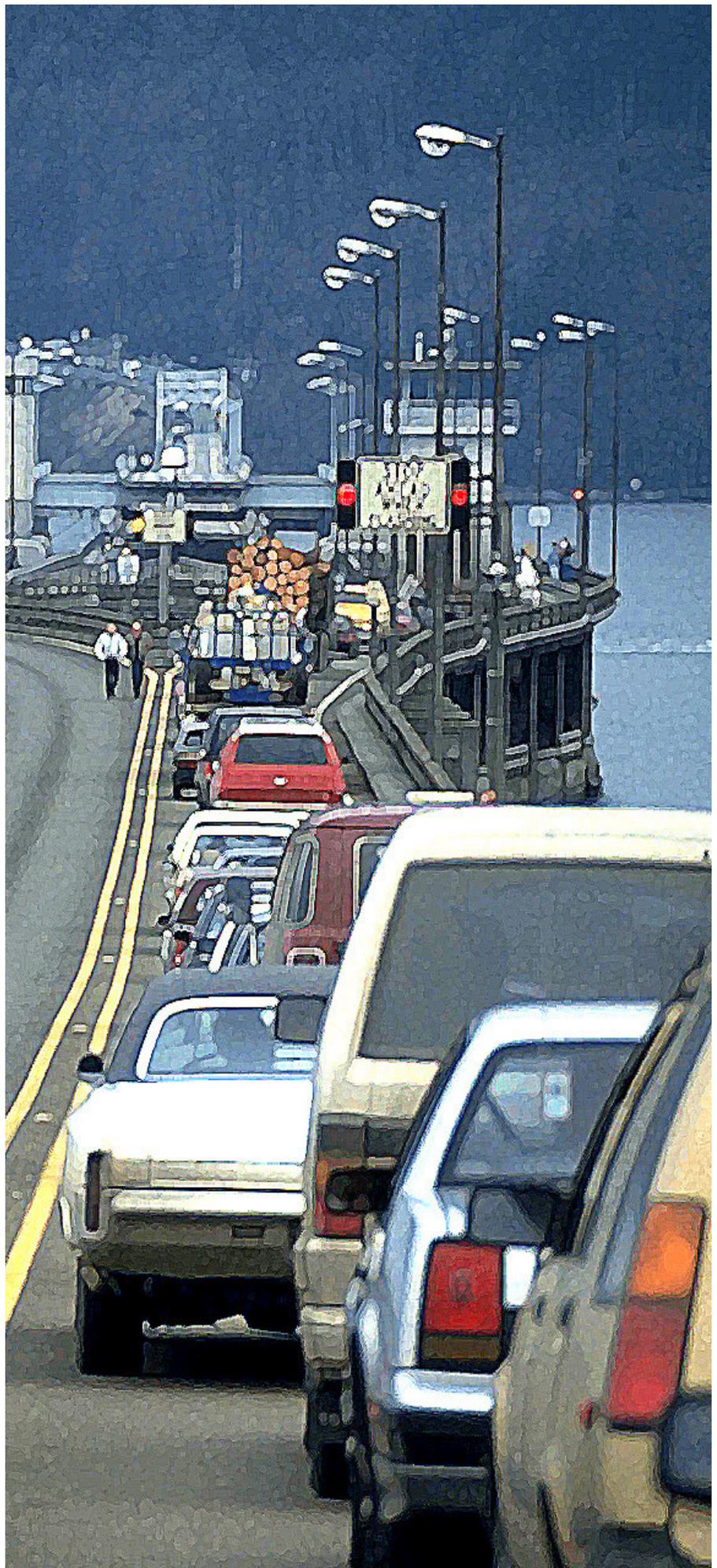
**Volume III of IV:**

**External ODOT  
Constituent  
Surveys—General  
Public, Other DOTs**

for the  
Ohio Department of Transportation  
Office of Research and Development  
and the  
Mid-Atlantic University  
Transportation Center

State Job Number: 14806(0)

**JUNE 2005**





## **Communication Strategies for State Transportation Research Programs**

### **Volume III of IV: External ODOT Constituent Surveys - General Public, Other DOTs**

for the  
Ohio Department of Transportation  
Office of Research and Development  
and the  
Mid-Atlantic University Transportation Center

State Job Number: 14806(0)

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16. Abstract <p>Transportation research is often "open ended" and difficult to measure, in that its beneficiaries may not know how they have been served by research activities and results. This research project sought to 1) obtain feedback from Ohio Department of Transportation (ODOT) constituents, 2) develop a strategic communication plan that supports ODOT's overall mission and goals, keeping in mind research office resources, and 3) develop a communication template that other DOTs could model or use. To accomplish these objectives, existing knowledge, attitudes, and behaviors regarding Ohio DOT's research office were obtained through a number of surveys. Those surveyed included the Ohio general public, internal DOT constituents (technical liaisons, administrators and directors, district deputy directors, district research contacts, FHWA regional center directors) and external DOT constituents (consultants, contractors, transportation committee legislators, and college civil engineering department heads). In addition, a nationwide survey of DOT research office directors was conducted to determine the constituents with whom their offices communicate and the means by which they do so.</p> <p>Common areas of interest among constituents were identified, from which key research office messages were proposed, so they might be included in research office correspondence and publicity. Constituents' preferred methods of obtaining research office information also was explored. The study found that most research office directors believe they communicate well internally but do not communicate effectively to external audiences. It was found that part of this problem could lie in the underutilization of communication office personnel, who have the training and contacts to spread the word about transportation research.</p>		
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## Chapter 1: Introduction/Method

### 1.1 Background

This project involved seven separate external ODOT constituent surveys, conducted between September 2002 and October 2003. External constituents consisted of the following groups:

- **Ohio Residents**
- **Other state DOT Research Offices**
- Ohio College Civil Engineering Department Chairs
- Ohio Legislators serving on transportation-related committees
- FHWA Regional Resource Center Directors
- Ohio Contractors Association Officers
- Ohio County Engineers Association Officers

All surveys were reviewed and pre-approved by the project's technical liaison, Monique Evans, and both project PIs. The large surveys (Ohio residents and other state DOT research offices) were also pre-tested, using a 10% random sample to identify possible problem questions and adjust them accordingly. Survey methods included random telephone, fax, and e-mail. At least two follow-up contacts were made for e-mailed and faxed surveys to try to increase response rates.

Survey response rates and survey dates are provided in the key summary findings pages for each survey. The key summary findings precede each survey instrument and detailed results for each question asked.

### 1.2 Ohio Residents/General Public survey instrument

*Intro Script:*

Hello, my name is \_\_\_\_\_. I'm calling from the Research Survey Center at Ohio University. We are conducting a PUBLIC OPINION SURVEY and asking Ohio residents a few questions about transportation and media use issues. We absolutely are not trying to sell you anything and this survey will take less than 10 minutes to complete. Your phone number was dialed at random and your answers to this survey are strictly confidential. I need to talk to the adult in your home who is home now and will be the next to celebrate his or her birthday. Would that be you?

1. What is your primary method of transportation? Is it
  - Walking
  - Bus
  - Personal automobile
  - Car pool
  - Bicycle
  - Other (please specify) \_\_\_\_\_
  
2. Which of the following issues regarding Ohio highways, if any, are of major concern to you? Are you concerned about
  - Safety
  - Environmental issues

Snow and ice removal  
Construction or work zones  
Road repair needs  
Road congestion  
Bridges or  
Something else? (please specify) \_\_\_\_\_

3. In your opinion, how important is research in providing solutions to your transportation concerns? Is research

Not at all important    Somewhat important    important    very important

4. How interested are you in knowing HOW research is addressing your transportation concerns?

Not at all interested    Somewhat interested    Interested    Very interested

5. Have you ever heard any news stories about Ohio’s transportation RESEARCH activities or projects?

5a. [If yes] What specific project or activity do you recall?

5b. How did you hear about it? Did you hear about it from

Local TV news,  
Local newspaper  
Radio or  
Something else (please specify) \_\_\_\_\_

5c. In your opinion, was the coverage or discussion positive, negative or neutral?

Positive  
Negative  
Neutral  
Don’t recall

6. Are you aware that there is a TRANSPORTATION RESEARCH PROGRAM at ODOT, Ohio’s Department of Transportation?

Yes  
No  
Not sure

7. Are you aware that ODOT maintains a Web site with information on licensing, construction, traffic and weather-related road conditions?

Yes  
No  
Not sure

7a.[If yes] Have you ever accessed ODOT’s Web site?

7b. [If yes] For what purpose?

8. How long have you been a resident of Ohio?
- Less than 1 year
  - 1 to 5 years
  - 6 to 10 years
  - 11 to 15 years
  - 16 to 20 years
  - More than 20 years
9. How many licensed drivers are in your household?
10. How many licensed automobiles do members of your household own?
11. Overall, from what ONE source would you say you get MOST of your news?
- Television
  - Newspapers
  - Magazines
  - Radio
  - Internet/Web
  - Other people
  - Another source
  - Don't know
  - Refused
12. In a typical week, how many days do you read a local newspaper?
- None
  - One Day
  - Two Days
  - Three Days
  - Four Days
  - Five Days
  - Six Days
  - Seven Days
  - Don't Know
  - Refused
13. In a typical week, how many days do you watch a local television news program?
- None
  - One Day
  - Two Days
  - Three Days
  - Four Days
  - Five Days
  - Six Days
  - Seven Days
  - Don't Know
  - Refused

14. In a typical week, how many days do you listen to radio news?

- None
- One Day
- Two Days
- Three Days
- Four Days
- Five Days
- Six Days
- Seven Days
- Don't Know
- Refused

15. In a typical week, how many days do you access Internet Web sites for news?

- None
- One Day
- Two Days
- Three Days
- Four Days
- Five Days
- Six Days
- Seven Days
- Don't Know
- Refused

Finally, I have a few questions about you that are for statistical purposes only. This information is completely confidential.

16. What race or ethnic group do you identify with?

- African-American
- Asian-American
- Caucasian
- Hispanic
- Other
- Refused

17. Would you mind telling me the HIGHEST level of formal education you've completed?

- Some High School
- High School Graduate
- Some College
- College Graduate
- Some Graduate School
- Advanced Degree
- Refused

18. What is your age? Are you
- 18 to 25
  - 26 to 35
  - 36 to 45
  - 46 to 55
  - 56 to 65
  - 66 to 75
  - over 75
19. How many adults, 18 years or older, reside in your home?
20. How many children, under 18, live in your home?
21. Which of the following broad categories best describes your total household income:
- Less than \$10,000
  - \$10,000 to \$25,000
  - \$26,000 to \$40,000
  - \$41,000 to \$60,000
  - More than \$60,000
  - Don't Know
  - Refused
22. What is the five-digit postal zip code to your home?

Those are all the questions I have for you. Thank you for your participation in this survey.

### **1.3 Other State DOT Research Offices survey instrument**

As a state transportation research office director, you are undoubtedly aware of the importance of communicating the results of your research to the right people, i.e. marketing your program. However, you may have some concerns about how to actually develop a comprehensive, effective and efficient communication strategy. The Ohio DOT, whose Research Administrator is Monique Evans, is sponsoring a study to examine this issue. One of the deliverables will be a communications template that could be adapted for implementation by any state DOT research office. The following survey is being sent to all state DOT Research Offices. We understand that the survey will take you a few minutes to complete; however, the results of this study are expected to benefit you directly, so your participation is very important.

To complete the survey, simply hit the reply button, answer each question, and then send the message. Thank you in advance for your contribution to this national study.

Please note: This data is being collected for research purposes in conjunction with Ohio University. Participation is voluntary, and completion and return of this survey implies you are at least 18 years of age and that you consent to the use of this data for research purposes.

#### **Part I. Research Office Structure**

1. About what percent of your research is conducted internally by members of your staff/DOT, or externally by others, such as university researchers, transportation centers, government agencies or consultants?
  - \_\_\_\_\_ percent Internal
  - \_\_\_\_\_ percent External
  
2. Is the technical oversight of the research program centralized by people inside the research office, or decentralized and overseen by others in the agency, such as engineers?
  - \_\_\_\_\_ Centralized
  - \_\_\_\_\_ Decentralized
  
3. What percentage of your program is devoted to research in each of the following?
  - \_\_\_\_\_ percent National
  - \_\_\_\_\_ percent Regional (please define your region: \_\_\_\_\_)
  - \_\_\_\_\_ percent State-specific
  
4. What is your current annual research budget:
  - \_\_\_\_\_ State SP&R Monies
  - \_\_\_\_\_ Other State Monies
  - \_\_\_\_\_ Pooled Fund Projects
  - \_\_\_\_\_ Federal
  
5. How many FTEs are employed in your research office in each of the following categories?
  - \_\_\_\_\_ Administrative
  - \_\_\_\_\_ Secretarial/Clerical
  - \_\_\_\_\_ Technical
  
6. Do any of your FTEs focus on marketing your research program?
 

Yes

  - a. How many? \_\_\_\_\_

No
  
7. Which one of the following phrases best describes your primary mission:
  - \_\_\_\_\_ Hearing of problems through external constituents and solving them
  - \_\_\_\_\_ Identifying the problems internally and solving them
  - \_\_\_\_\_ Serving as a technical resource
  - \_\_\_\_\_ Attaining national recognition
  - \_\_\_\_\_ Other (*please specify*) \_\_\_\_\_
  
8. About what percent of your total research budget is spent in the following areas:
  - \_\_\_\_\_ percent Traffic
  - \_\_\_\_\_ percent Safety
  - \_\_\_\_\_ percent Hydraulics
  - \_\_\_\_\_ percent Structures
  - \_\_\_\_\_ percent Planning
  - \_\_\_\_\_ percent Management Issues
  - \_\_\_\_\_ percent Geometrics or Design
  - \_\_\_\_\_ percent Materials or Pavements

- percent Construction  
 percent Environmental Issues  
 percent Other Areas (*please specify*) \_\_\_\_\_

9. About what percent of your research projects have the following scope:
- percent Literature Reviews or Syntheses  
 percent Paper Studies (i.e. involves data, but data are acquired through published sources)  
 percent Laboratory Studies (i.e. involves data, but data are acquired through controlled laboratory conditions)  
 percent Field Studies? (i.e. data are acquired through experiments conducted in the field)  
 percent Development Projects? (i.e. results in a product such as a software program or traffic control device)

## Part II. Communication tools/methods

10. With which of the following constituents/customers do you regularly communicate:
- other DOTs  
 contractor associations  
 consultants  
 universities  
 internal division offices  
 district/regional offices  
 general public  
 other (*please specify*) \_\_\_\_\_
12. What conferences or trade shows, if any, do your research office staff regularly attend?  
(*please list below*)
11. Do you have exhibits at conferences?  
Yes  
No
12. Are your program's research projects presented at conferences or trade shows?  
Yes  
No
13. Do you ask/require principal investigators to acknowledge your office in some way in their publications and presentations?  
Yes  
No

14. Which of the following promotional communication tools do you employ to reach construction contractors:

- office and/or DOT newsletter(s)
  - a. Is it provided in hard-copy, electronically, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- news releases
- brochures
- tech briefs
- feature articles in other publications, such as trade journals and professional magazines
- research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_
- chat room or electronic bulletin board
- listserv/electronic mail list
- letters
- speeches/presentations
- telephone
- personal e-mail
- office visits
- conferences/meetings
- training sessions
- other (*please specify*) \_\_\_\_\_
- none

15. Which methods do you believe are most effective for reaching construction contractors? (These may or may not be the same methods you are currently using.)

16. Which of the following promotional communication tools do you employ to reach university researchers:

- office and/or DOT newsletter(s)
  - a. Is it provided in hard-copy, electronic, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- news releases
- brochures
- tech briefs
- Transportation Research Information Services (TRIS)
- Research in Progress (RiP) Database
- feature articles in other publications, such as trade journals and professional magazines
- research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_
- chat room or electronic bulletin board
- listserv/electronic mail list
- letters
- speeches/presentations
- telephone
- personal e-mail

- office visits
- conferences/meetings
- training sessions
- other (*please specify*) \_\_\_\_\_
- none

17. Which methods do you believe are most effective for reaching university researchers? (These may or may not be the same methods you are currently using.)

18. Which of the following promotional communication tools do you employ to reach other DOT research offices:

- office and/or DOT newsletter(s)
  - a. Is it provided in hard-copy, electronic, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- Transportation Research Information Services (TRIS)
- Research in Progress (RiP) Database
- news releases
- brochures
- tech briefs
- feature articles in other publications, such as trade journals and professional magazines
- research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_
- chat room or electronic bulletin board
- listserv/electronic mail list
- letters
- speeches/presentations
- telephone
- personal e-mail
- office visits
- conferences/meetings
- other (*please specify*) \_\_\_\_\_
- none

19. Which methods do you believe are most effective for reaching other DOT research offices? (These may or may not be the same methods you are currently using.)

20. Which of the following promotional communication tools do you employ to reach the general public:

- office and/or DOT newsletter(s)
  - a. Is it provided in hard-copy, electronic, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- news releases
- pitch stories to media
- brochures
- tech briefs
- research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_

- \_\_\_\_\_ letters
- \_\_\_\_\_ speeches/presentations
- \_\_\_\_\_ annual reports (page in DOT's or separate research program report)
- \_\_\_\_\_ telephone
- \_\_\_\_\_ personal e-mail
- \_\_\_\_\_ public meetings
- \_\_\_\_\_ conferences
- \_\_\_\_\_ other (*please specify*) \_\_\_\_\_
- \_\_\_\_\_ none

21. Which methods do you believe are most effective for reaching the general public? (These may or may not be the same methods you are currently using.)

22. Which of the following promotional communication tools do you employ to reach consultants:

- \_\_\_\_\_ office and/or DOT newsletter(s)
  - a. Is it provided in hard-copy, electronic, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- \_\_\_\_\_ news releases
- \_\_\_\_\_ brochures
- \_\_\_\_\_ tech briefs
- \_\_\_\_\_ feature articles in other publications, such as trade journals and professional magazines
- \_\_\_\_\_ research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_
- \_\_\_\_\_ chat room or electronic bulletin board
- \_\_\_\_\_ listserv/electronic mail list
- \_\_\_\_\_ letters
- \_\_\_\_\_ speeches/presentations
- \_\_\_\_\_ telephone
- \_\_\_\_\_ personal e-mail
- \_\_\_\_\_ office visits
- \_\_\_\_\_ conferences/meetings
- \_\_\_\_\_ other (*please specify*) \_\_\_\_\_
- \_\_\_\_\_ none

23. Which methods do you believe are most effective for reaching consultants? (These may or may not be the same methods you are currently using.)

24. Which of the following promotional communication tools do you employ to reach internal DOT constituents?

- \_\_\_\_\_ office newsletter(s)
  - a. Is it provided in hard-copy, electronic, or both? \_\_\_\_\_
  - b. How often is it published? \_\_\_\_\_
  - c. How many pages? \_\_\_\_\_
- \_\_\_\_\_ news releases
- \_\_\_\_\_ brochures
- \_\_\_\_\_ tech briefs
- \_\_\_\_\_ feature articles in other internal publications
- \_\_\_\_\_ research office web page
  - a. Does it include an e-mail link? \_\_\_\_\_



32. You indicated how you provide information to your constituents. How do you elicit communication from your constituents? Do you elicit information by
- \_\_\_\_\_ making phone calls
  - \_\_\_\_\_ sending e-mails
  - \_\_\_\_\_ conducting surveys
  - \_\_\_\_\_ using your DOT's Intranet
  - \_\_\_\_\_ attending professional meetings
  - \_\_\_\_\_ serving on professional committees
  - \_\_\_\_\_ providing contact phone numbers in publications
  - \_\_\_\_\_ providing contact e-mail addresses in publications
  - \_\_\_\_\_ providing contact phone numbers on web sites
  - \_\_\_\_\_ providing contact e-mail links on web sites
  - \_\_\_\_\_ hosting conferences or symposia
  - \_\_\_\_\_ holding regularly scheduled meetings
  - \_\_\_\_\_ attending other types of events
  - \_\_\_\_\_ other (*please specify*) \_\_\_\_\_
33. In what ways do you learn about other state research office projects/activities?
- \_\_\_\_\_ Transportation Research Information Services (TRIS)
  - \_\_\_\_\_ Research in Progress (RiP) Database
  - \_\_\_\_\_ AASHTO Research Advisory Committee (RAC)
  - \_\_\_\_\_ conferences
  - \_\_\_\_\_ others (*please specify*) \_\_\_\_\_
34. Consider your responses to questions 32 and 33 above. On a scale of 1 to 5, with 1 being not at all effective and 5 being very effective, how effective do you believe these communication tools are at helping you solve your state's research problems?
- |                      |   |   |   |                |
|----------------------|---|---|---|----------------|
| 1                    | 2 | 3 | 4 | 5              |
| not at all effective |   |   |   | very effective |
35. On a scale of 1 to 5, with 1 being not at all important and 5 being very important, how important do you believe it is for state research offices to actively share information with each other?
- |                      |   |   |   |                |
|----------------------|---|---|---|----------------|
| 1                    | 2 | 3 | 4 | 5              |
| not at all important |   |   |   | very important |
36. What suggestions, if any, do you have to better obtain and share information among state research offices?

Thank you for participating in this survey. The results will be available at the study's conclusion. Meanwhile, should you have questions about this work, please contact Dr. Diana Knott at knott@ohio.edu or 740-597-1294.

## Chapter 2:

### Key Survey Findings

#### 2.1 Ohio Residents/General Public key findings

N = 534 (5 % margin of error, 95% confidence interval)

Survey conducted September 2002 at the Ohio University Scripps-Howard Survey Research Center

#### *Key Summary Findings (complete survey results appear in Appendix A)*

- More than 90% of respondents report their personal automobile is their primary method of transportation
- 33% of respondents reported safety was the major issue of concern regarding Ohio highways
- 15% reported ongoing construction; road repair needs; traffic congestion
- 92% of respondents reported that research was somewhat or very important in solving transportation problems
- 81% reported they were somewhat or very interested in knowing how research is addressing transportation problems
- However, 80% reported they were not aware there is an ODOT research program.
- Only 17% reported they had heard about any Ohio transportation research projects
- Of those who had heard about them, more than 34% reported they learned of them through newspapers; another 34% reported they learned of them through local TV news
- Most of those who'd heard of the projects (more than 42%) reported the coverage was positive; another 36% reported the coverage was neutral in tone
- The majority of respondents (nearly 66%) reported they knew of ODOT's Web site
- Of those, 40% reported they had accessed it
- Most respondents (nearly 80%) have been a resident of Ohio for more than 20 years
- Most respondents (nearly 56%) report they get most of their news from television; another 25% get it from newspapers

## 2.2 Other State DOT Research Offices key findings

N=40/50 (80% response rate)

Survey conducted April 2003

### *Key Summary Findings (complete survey results appear in Appendix B)*

#### *Part I—Research Office Structure*

- 60% of responding research offices report less than 10% of their research is *conducted internally* (by research office staff or their DOTs).
- Nearly 50% of responding offices report that technical oversight of their research programs are *centralized* (conducted by research office staff); another third report they are *decentralized* (overseen by others in the agency); and the remainder say *both types* of oversight are used.
- About 75% of responding research offices report that *national programs* make up 20% or less of their research expenditures.
- More than 75% of respondents report that *regional programs* make up 10% or less of their research expenditures.
- More than 50% of respondents report that *state-specific programs* make up 75% of their research expenditures.
- Nearly 71% of respondents report 0-2 *administrative FTEs* in their research office.
- More than 85% report 0-1 *secretarial/clerical FTEs* in their research office.
- 50% report 0-4 *technical FTEs* in their research office.
- More than 55% of respondents report that *no FTEs* focus on marketing the research program.
- The highest rated *primary mission* identified by respondents overall was to “identify and solve problems internally.”

#### *Part II—Communication Tools/Methods*

- More than 97% of respondents report regularly communicating with *universities*.
- More than 92% report regularly communicating with *other DOTs*.
- More than 90% report regularly communicating with *internal division* offices.
- More than 82% report regularly communicating with *district/regional* offices.
- 68% report regularly communicating with *consultants*.
- More than 48% report regularly communicating with *contractor associations*.
- About 44% report regularly communicating with the *general public*.
- Another 27% report regularly communicating with *others* (e.g., FHWA, LTAP, governmental and technical agencies, legislators).

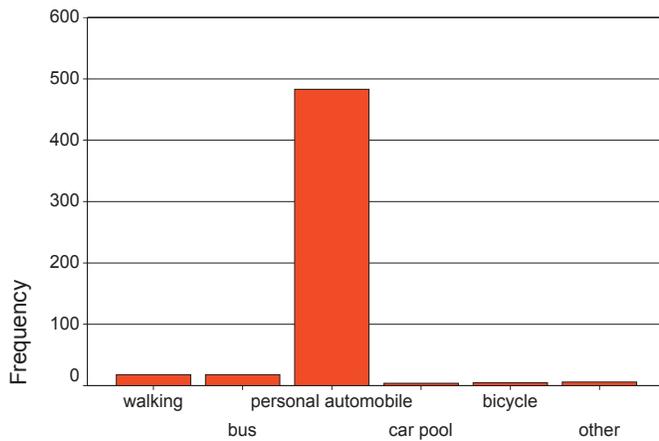
- In general, across constituents, *newsletters, Web sites, and meetings* seem to be the most commonly used communication tools.
- In addition, 78% indicate they *present research project results* at conferences or trade shows.
- More than 75% ask or *require P.I.s to acknowledge* their office in publications and presentations.
- More than 40% of respondents indicate they have research office *exhibits* at conferences.
- About 27% of respondents have developed a *communications or marketing plan*.
- 22% of respondents have dedicated *communications/marketing budgets*.
- Only 35% of state research offices communicate regularly with their *DOT communication office*.

## Appendix A Ohio Residents/General Public Survey Results

**Q1: First, what is your primary method of transportation? Is it walking, bus, personal automobile, car pool, bicycle or other?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Walking	18	.9	3.4	3.4
	Bus	18	.9	3.4	6.7
	Personal Automobile	483	23.2	90.4	97.2
	Car Pool	4	.2	.7	97.9
	Bicycle	5	.2	.9	98.9
	Other	6	.3	1.1	100.0
	Total	534	25.6	100.0	
Missing	System	1551	74.4		
Total		2085	100.0		

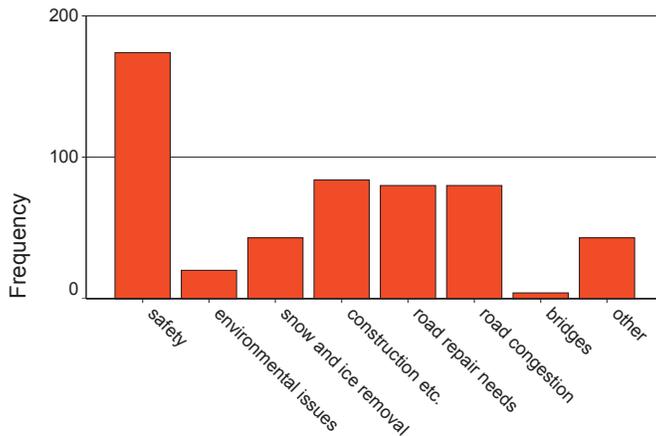
What is your primary method of transportation?



**Q2: Which of the following issues regarding Ohio highways, if any, are of major concern to you?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Safety	174	8.3	33.0	33.0
	Environmental Issues	20	1.0	3.8	36.7
	Snow Removal	43	2.1	8.1	44.9
	Construction	84	4.0	15.9	60.8
	Road Repair Needs	80	3.8	15.2	75.9
	Road Congestion	80	3.8	15.2	91.1
	Bridges	4	.2	.8	91.9
	Other	43	2.1	8.1	100.0
	Total	528	25.3	100.0	
Missing	System	1557	74.7		
Total		2085	100.0		

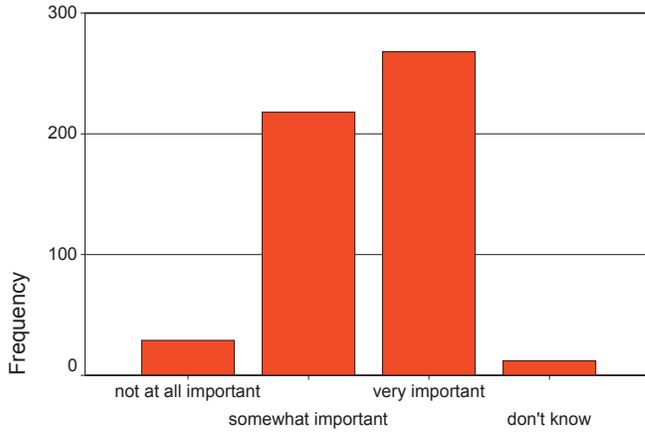
Which of the following issues regarding Ohio highways are of concern to you?



**Q3: In your opinion, how important is research in providing solutions to your transportation concerns?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not At All Important	29	1.4	5.5	5.5
	Somewhat Important	218	10.5	41.4	46.9
	Very Important	268	12.9	50.9	97.7
	Don't Know	12	.6	2.3	100.0
	Total	527	25.3	100.0	
Missing	System	1558	74.7		
Total		2085	100.0		

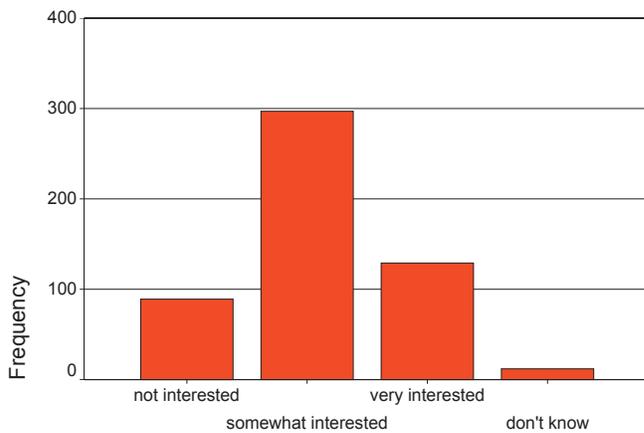
How important is research in providing solutions to your transportation concerns?



**Q4: How interested are you in knowing HOW research is addressing your transportation concerns?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Interested	89	4.3	16.9	16.9
	Somewhat Interested	297	14.2	56.4	73.2
	Very Interested	129	6.2	24.5	97.7
	Don't Know	12	.6	2.3	100.0
	Total	527	25.3	100.0	
Missing	System	1558	74.7		
Total		2085	100.0		

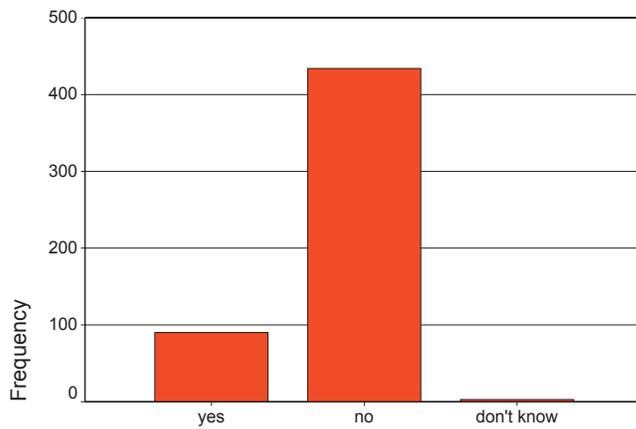
How interested are you in knowing HOW research is addressing your concerns?



**Q5: Have you ever heard any news stories about Ohio's transportation RESEARCH activities or projects?**

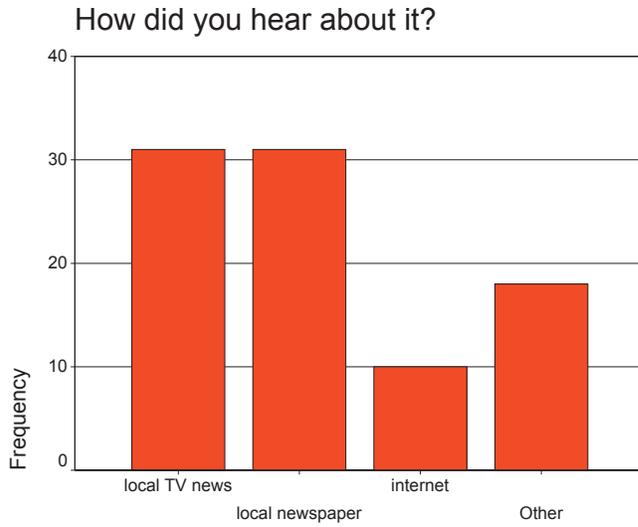
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	90	4.3	17.1	17.1
	No	434	20.8	82.4	99.4
	Don't Know	3	.1	.6	100.0
	Total	527	25.3	100.0	
Missing	System	1558	74.7		
Total		2085	100.0		

Have you ever heard any news about Ohio transportation research projects?



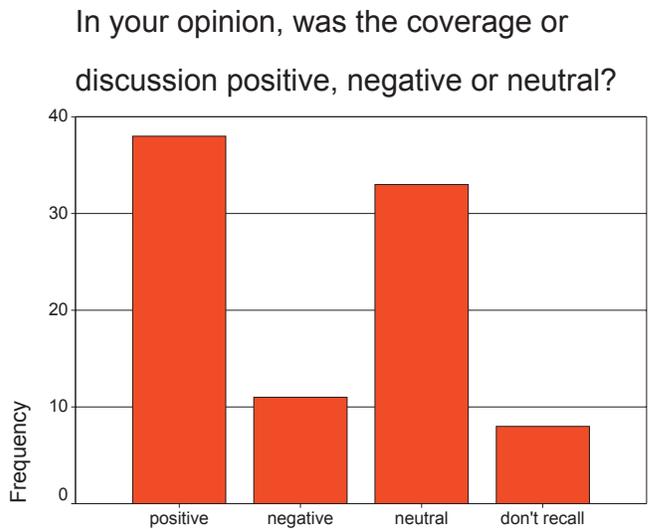
**Q5b: How did you hear about it?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local TV News	31	1.5	34.4	34.4
	Local Newspaper	31	1.5	34.4	68.9
	Internet	10	.5	11.1	80.0
	Other	18	.9	20.0	100.0
	Total	90	4.3	100.0	
Missing	System	1995	95.7		
Total		2085	100.0		



**Q5c: In your opinion, was the coverage or discussion positive, negative or neutral?**

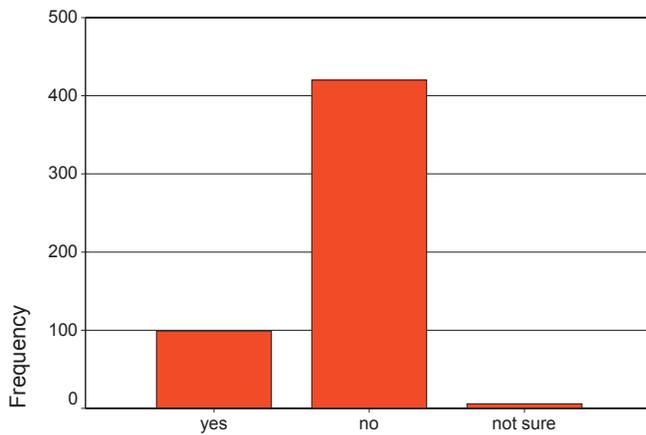
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	positive	38	1.8	42.2	42.2
	negative	11	.5	12.2	54.4
	neutral	33	1.6	36.7	91.1
	don't recall	8	.4	8.9	100.0
	Total	90	4.3	100.0	
Missing	System	1995	95.7		
Total		2085	100.0		



**Q6: Are you aware that there is a TRANSPORTATION RESEARCH PROGRAM at ODOT, Ohio's Department of Transportation?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	99	4.7	18.9	18.9
	no	420	20.1	80.0	98.9
	not sure	6	.3	1.1	100.0
	Total	525	25.2	100.0	
Missing	System	1560	74.8		
Total		2085	100.0		

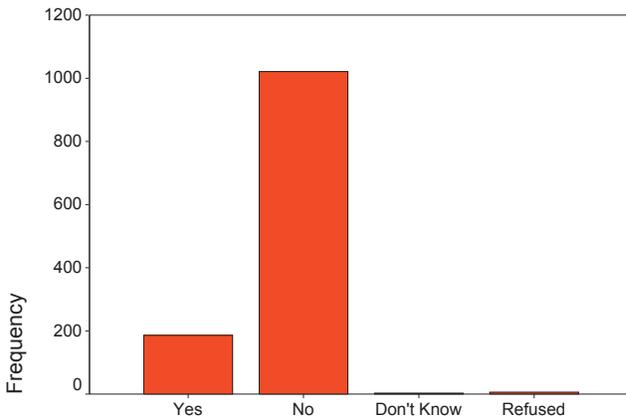
Are you aware that there is a transportation research program at ODOT?



**Q7: Do you ever use the official state of Ohio website?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	186	14.2	15.3	15.3
	2 No	1021	77.9	84.0	99.3
	4 Don't Know	3	.2	.2	99.5
	5 Refused, Not Ascertained	6	.5	.5	100.0
	Total	1216	92.8	100.0	
Missing	System	95	7.2		
Total		1311	100.0		

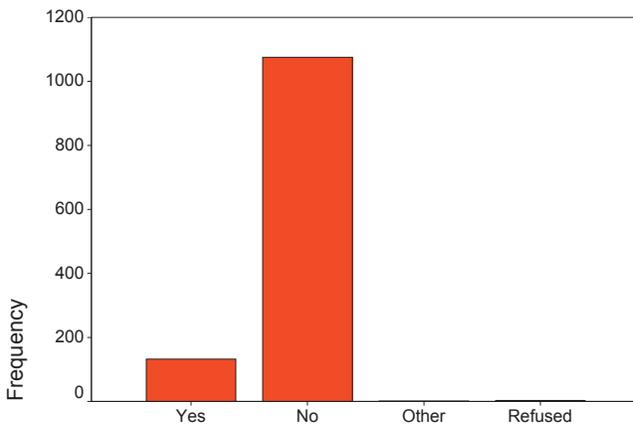
Do you ever use the official state of Ohio website?



**Q7a: (If yes to Q7) Do you ever use the Department of Transportation website that has information on Licensing, Construction, Traffic, and Weather?**

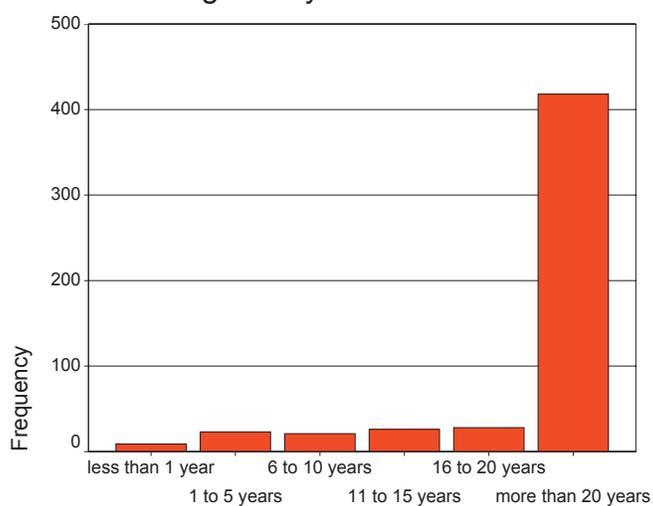
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	132	10.1	10.9	10.9
	2 No	1075	82.0	88.8	99.7
	3 Other	1	.1	.1	99.8
	5 Refused, Not Ascertained	3	.2	.2	100.0
	Total	1211	92.4	100.0	
Missing	System	100	7.6		
Total		1311	100.0		

Use DOT website



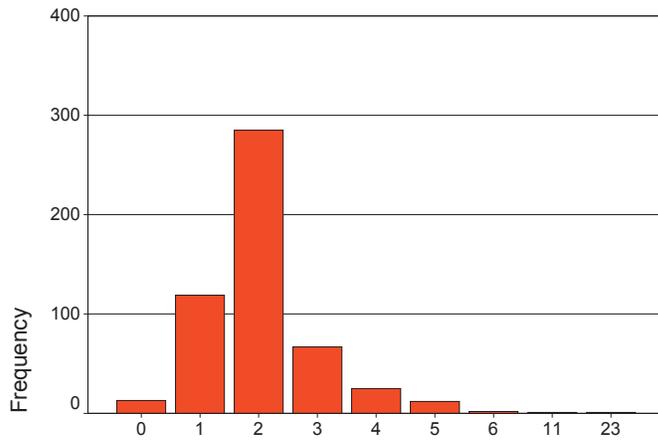
**Q8: How long have you been a resident of Ohio?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 year	9	.4	1.7	1.7
	1-5 yrs	23	1.1	4.4	6.1
	6-10yrs	21	1.0	4.0	10.1
	11-15 yrs	26	1.2	5.0	15.0
	16-20 yrs	28	1.3	5.3	20.4
	>20 yrs	418	20.0	79.6	100.0
	Total	525	25.2	100.0	
Missing	System	1560	74.8		
Total		2085	100.0		

**How long have you been a resident of Ohio****Q9: How many licensed drivers are in your household?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	13	.6	2.5	2.5
	1	119	5.7	22.7	25.1
	2	285	13.7	54.3	79.4
	3	67	3.2	12.8	92.2
	4	25	1.2	4.8	97.0
	5	12	.6	2.3	99.2
	6	2	.1	.4	99.6
	11	1	.0	.2	99.8
	23	1	.0	.2	100.0
	Total	525	25.2	100.0	
Missing	System	1560	74.8		
Total		2085	100.0		

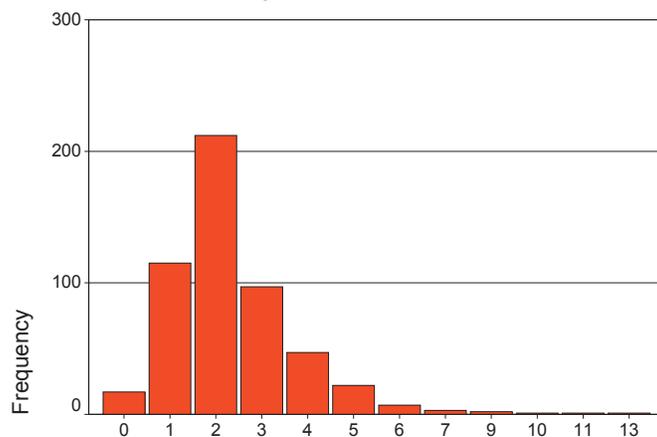
How many licensed drivers  
are in your household?



**Q10: How many licensed automobiles do members of your household own?**

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	0	17	.8	3.2	3.2	
	1	115	5.5	21.9	25.1	
	2	212	10.2	40.4	65.5	
	3	97	4.7	18.5	84.0	
	4	47	2.3	9.0	93.0	
	5	22	1.1	4.2	97.1	
	6	7	.3	1.3	98.5	
	7	3	.1	.6	99.0	
	9	2	.1	.4	99.4	
	10	1	.0	.2	99.6	
	11	1	.0	.2	99.8	
	13	1	.0	.2	100.0	
		Total	525	25.2	100.0	
	Missing	System	1560	74.8		
Total		2085	100.0			

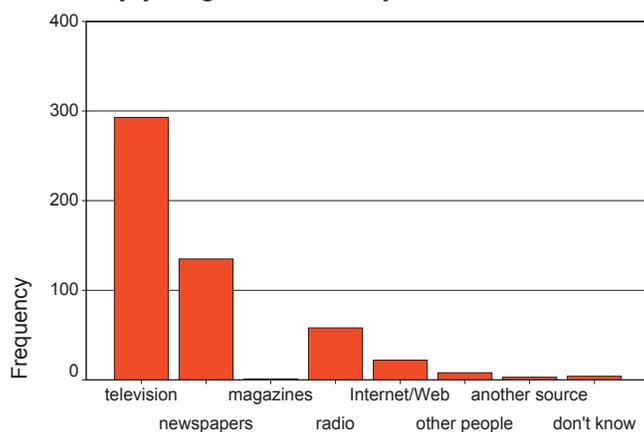
How many licensed automobiles do members of your household own?



**Q11: Overall, from what ONE source would you say you get MOST of your news?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TV	293	14.1	55.9	55.9
	newspapers	135	6.5	25.8	81.7
	magazines	1	.0	.2	81.9
	radio	58	2.8	11.1	92.9
	Internet	22	1.1	4.2	97.1
	other people	8	.4	1.5	98.7
	another source	3	.1	.6	99.2
	don't know	4	.2	.8	100.0
	Total	524	25.1	100.0	
Missing	System	1561	74.9		
Total		2085	100.0		

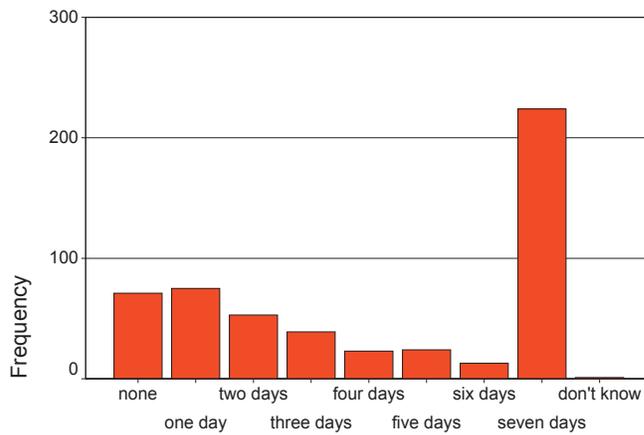
From what ONE source would you say you get MOST of your news?



**Q12: In the past week, how many days did you read a local newspaper?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	71	3.4	13.6	13.6
	1 day	75	3.6	14.3	27.9
	2 days	53	2.5	10.1	38.0
	3 days	39	1.9	7.5	45.5
	4 days	23	1.1	4.4	49.9
	5 days	24	1.2	4.6	54.5
	6 days	13	.6	2.5	57.0
	7 days	224	10.7	42.8	99.8
	don't know	1	.0	.2	100.0
	Total	523	25.1	100.0	
	Missing	System	1562	74.9	
Total		2085	100.0		

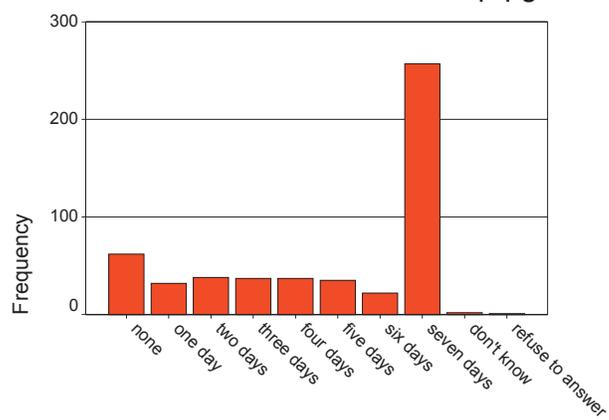
In the past week, how many days did you read a local newspaper?



**Q13: In the past week, how many days did you watch a local television news program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	62	3.0	11.9	11.9
	1 day	32	1.5	6.1	18.0
	2 days	38	1.8	7.3	25.2
	3 days	37	1.8	7.1	32.3
	4 days	37	1.8	7.1	39.4
	5 days	35	1.7	6.7	46.1
	6 days	22	1.1	4.2	50.3
	7 days	257	12.3	49.1	99.4
	don't know	2	.1	.4	99.8
	refuse	1	.0	.2	100.0
	Total	523	25.1	100.0	
Missing	System	1562	74.9		
Total		2085	100.0		

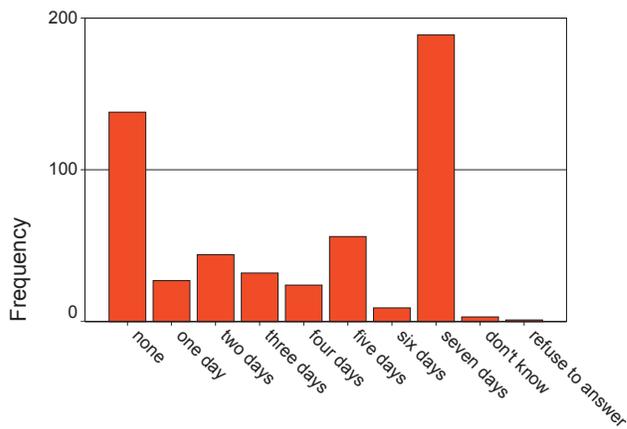
In the past week, how many days did you watch a local television news program?



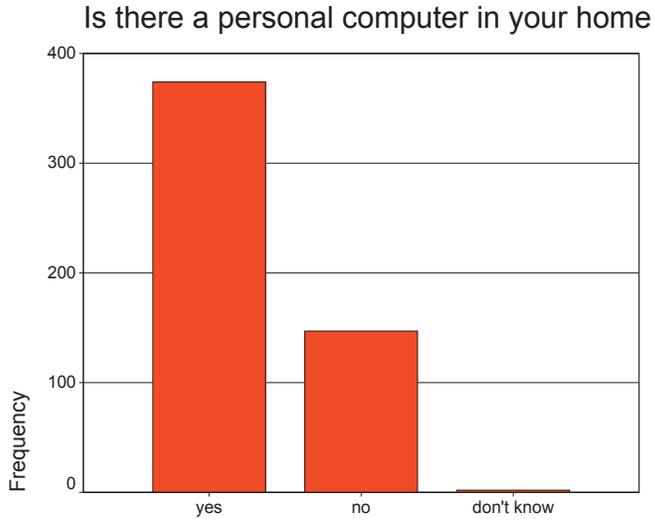
**Q14: In the past week, how many days did you listen to radio news?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	138	6.6	26.4	26.4
	1 day	27	1.3	5.2	31.5
	2 days	44	2.1	8.4	40.0
	3 days	32	1.5	6.1	46.1
	4 days	24	1.2	4.6	50.7
	5 days	56	2.7	10.7	61.4
	6 days	9	.4	1.7	63.1
	7 days	189	9.1	36.1	99.2
	don't know	3	.1	.6	99.8
	refuse	1	.0	.2	100.0
	Total	523	25.1	100.0	
Missing	System	1562	74.9		
Total		2085	100.0		

In the past week, how many days did you  
listen to radio news?

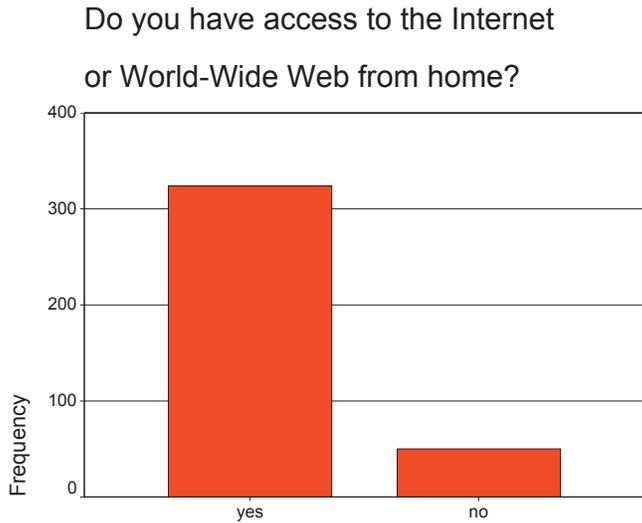
**Q15: Is there a personal computer in your home?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	374	17.9	71.5	71.5
	no	147	7.1	28.1	99.6
	don't know	2	.1	.4	100.0
	Total	523	25.1	100.0	
Missing	System	1562	74.9		
Total		2085	100.0		



**Q17:(If yes to 15) Do you have access to the Internet or World-Wide web from your home computer?**

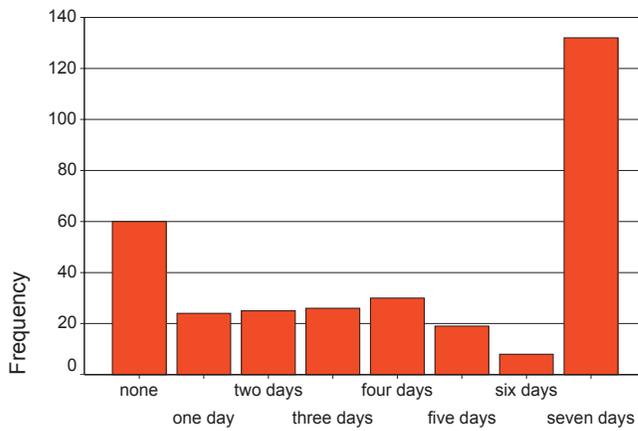
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	324	15.5	86.6	86.6
	no	50	2.4	13.4	100.0
	Total	374	17.9	100.0	
Missing	System	1711	82.1		
Total		2085	100.0		



**Q18: How many days in the past week have you used the Internet from home?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	60	2.9	18.5	18.5
	1 day	24	1.2	7.4	25.9
	2 days	25	1.2	7.7	33.6
	3 days	26	1.2	8.0	41.7
	4 days	30	1.4	9.3	50.9
	5 days	19	.9	5.9	56.8
	6 days	8	.4	2.5	59.3
	7 days	132	6.3	40.7	100.0
	Total	324	15.5	100.0	
Missing	System	1761	84.5		
Total		2085	100.0		

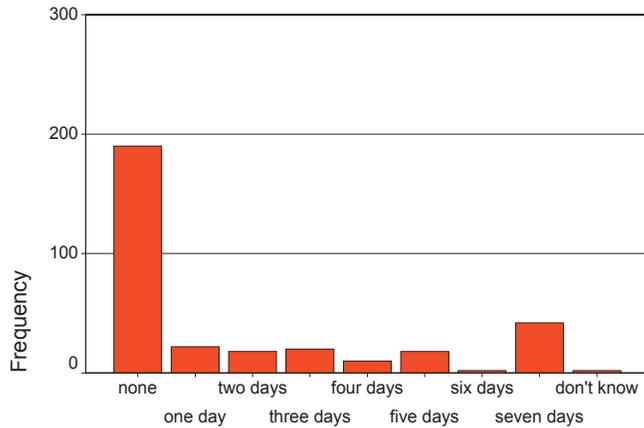
How many days in the past week have  
you used the Internet from home?



**Q-News: (If yes to 17) In the past week, how many days did you access the Internet Web sites for News?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	190	9.1	58.6	58.6
	1 day	22	1.1	6.8	65.4
	2 days	18	.9	5.6	71.0
	3 days	20	1.0	6.2	77.2
	4 days	10	.5	3.1	80.2
	5 days	18	.9	5.6	85.8
	6 days	2	.1	.6	86.4
	7 days	42	2.0	13.0	99.4
	don't know	2	.1	.6	100.0
	Total	324	15.5	100.0	
	Missing	System	1761	84.5	
Total		2085	100.0		

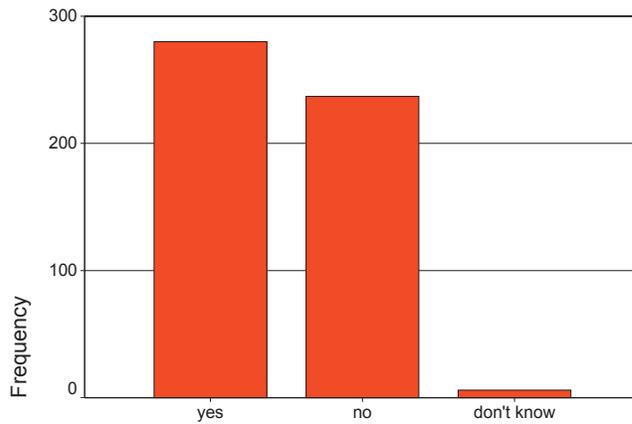
In the past week, how many days did you access the Internet for news?



**Q18b: Do you have access to the Internet from a place outside your home?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	280	13.4	53.5	53.5
	no	237	11.4	45.3	98.9
	don't know	6	.3	1.1	100.0
	Total	523	25.1	100.0	
Missing	System	1562	74.9		
Total		2085	100.0		

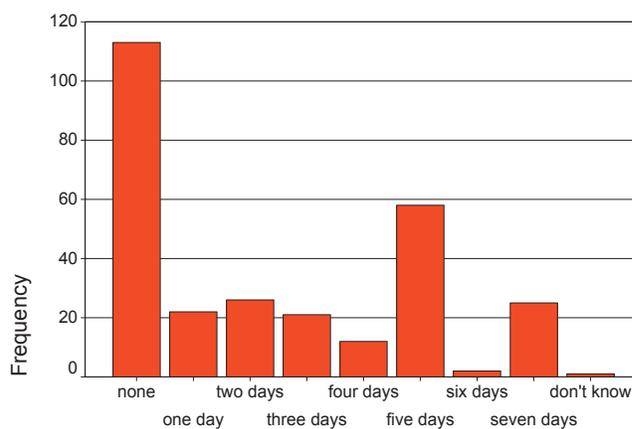
Do you have access to the Internet from  
a place outside your home?



**Q20: How many days in the past week have you used the Internet somewhere outside the home?**

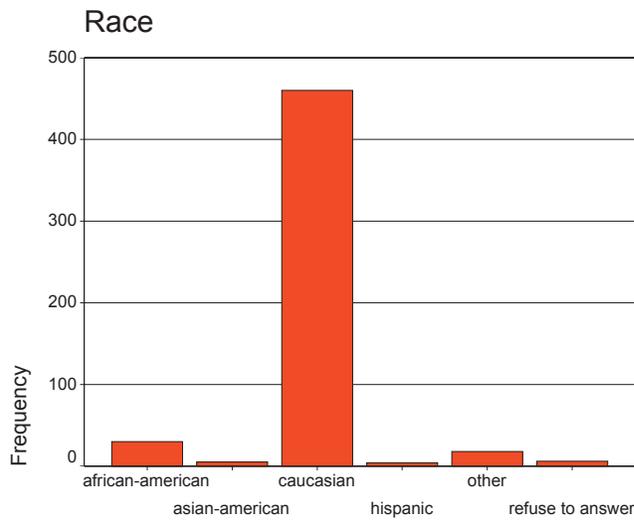
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	113	5.4	40.4	40.4
	1 day	22	1.1	7.9	48.2
	2 days	26	1.2	9.3	57.5
	3 days	21	1.0	7.5	65.0
	4 days	12	.6	4.3	69.3
	5 days	58	2.8	20.7	90.0
	6 days	2	.1	.7	90.7
	7 days	25	1.2	8.9	99.6
	don't know	1	.0	.4	100.0
	Total	280	13.4	100.0	
Missing	System	1805	86.6		
Total		2085	100.0		

How many days in the past week have you  
used the Internet outside the home?



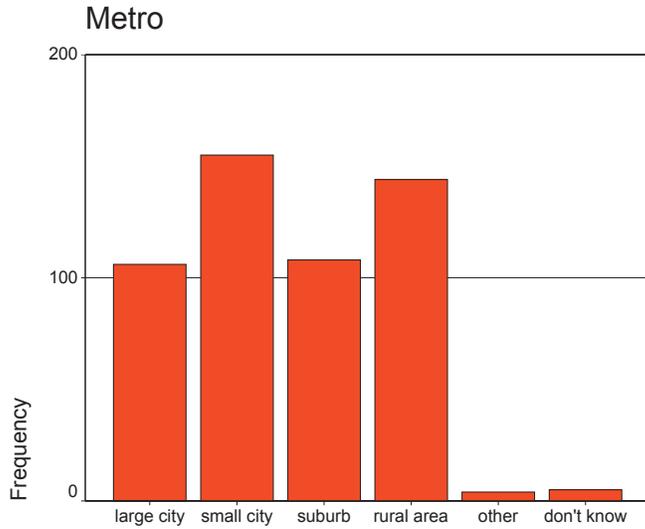
**Q-Race: What race or ethnic group do you identify with?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African-American	30	1.4	5.7	5.7
	Asian-American	5	.2	1.0	6.7
	Caucasian	460	22.1	88.0	94.6
	Hispanic	4	.2	.8	95.4
	Other	18	.9	3.4	98.9
	Refused	6	.3	1.1	100.0
	Total	523	25.1	100.0	
Missing	System	1562	74.9		
Total		2085	100.0		



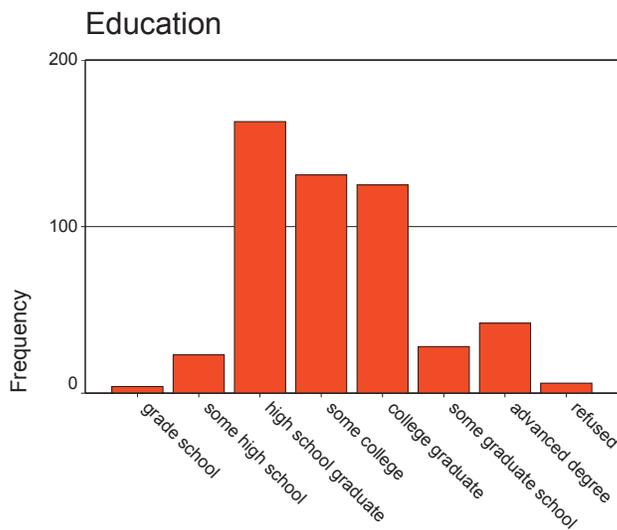
**Q-Metro: Do you live in a city of more than 100,000 people, in a smaller city, in a suburb of a city or in a rural area?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	large city	106	5.1	20.3	20.3
	small city	155	7.4	29.7	50.0
	suburb	108	5.2	20.7	70.7
	rural	144	6.9	27.6	98.3
	other	4	.2	.8	99.0
	don't know	5	.2	1.0	100.0
	Total	522	25.0	100.0	
Missing	System	1563	75.0		
Total		2085	100.0		



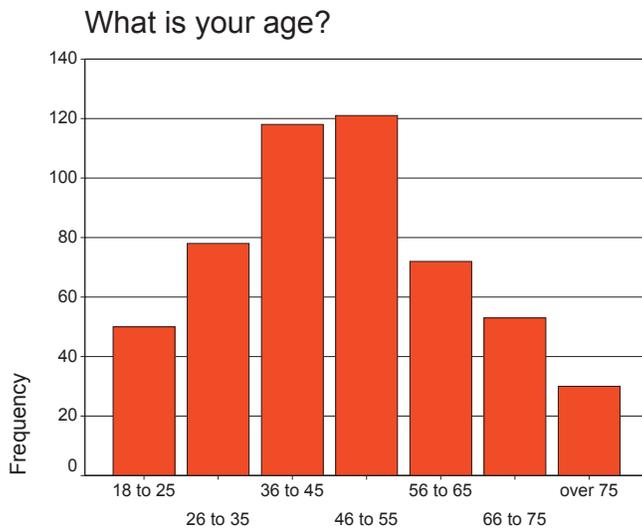
**Q-Education: Would you mind telling me the HIGHEST level of formal education you've completed?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Grade School	4	.2	.8	.8
	Some High School	23	1.1	4.4	5.2
	High School Grad	163	7.8	31.2	36.4
	Some College	131	6.3	25.1	61.5
	College Grad	125	6.0	23.9	85.4
	Some Grad School	28	1.3	5.4	90.8
	Advanced Degree	42	2.0	8.0	98.9
	refused	6	.3	1.1	100.0
	Total	522	25.0	100.0	
Missing	System	1563	75.0		
Total		2085	100.0		



**Q-Age: What is your age?**

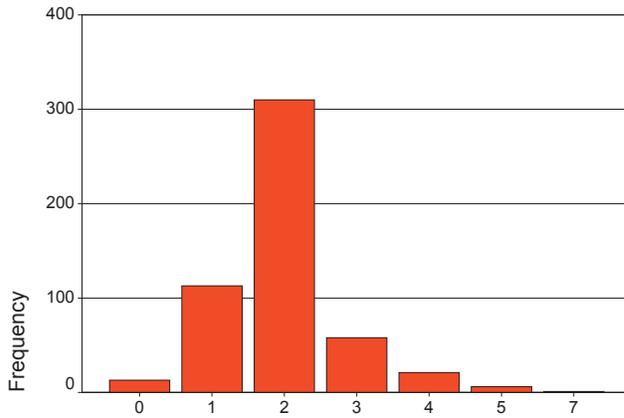
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A:8-25	50	2.4	9.6	9.6
	A:26-35	78	3.7	14.9	24.5
	A:36-45	118	5.7	22.6	47.1
	A:46-55	121	5.8	23.2	70.3
	A:56-65	72	3.5	13.8	84.1
	A:66-75	53	2.5	10.2	94.3
	over 75	30	1.4	5.7	100.0
	Total	522	25.0	100.0	
Missing	System	1563	75.0		
Total		2085	100.0		



**Q33: How many adults, 18 years or older, reside in your home?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	13	.6	2.5	2.5
	1	113	5.4	21.6	24.1
	2	310	14.9	59.4	83.5
	3	58	2.8	11.1	94.6
	4	21	1.0	4.0	98.7
	5	6	.3	1.1	99.8
	7	1	.0	.2	100.0
	Total	522	25.0	100.0	
Missing	System	1563	75.0		
Total		2085	100.0		

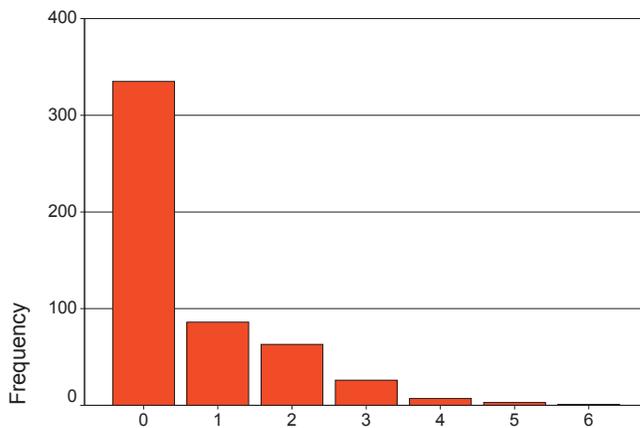
How many adults, 18 years or older, reside in your home?



**Q34: How many children, under 18, live in your home?**

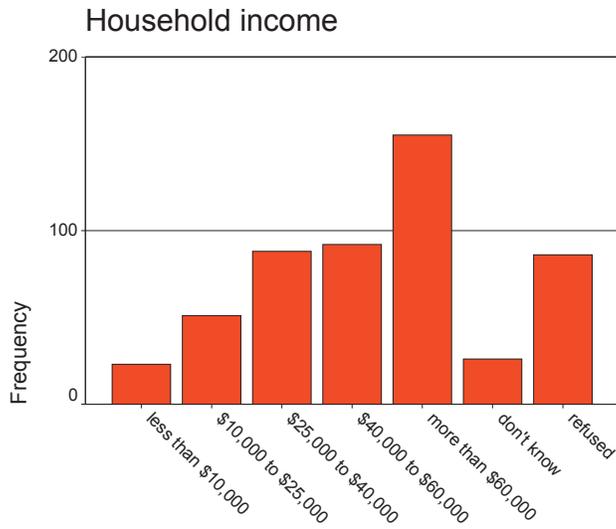
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	none	335	16.1	64.3	64.3
	1	86	4.1	16.5	80.8
	2	63	3.0	12.1	92.9
	3	26	1.2	5.0	97.9
	4	7	.3	1.3	99.2
	5	3	.1	.6	99.8
	6	1	.0	.2	100.0
	Total	521	25.0	100.0	
Missing	System	1564	75.0		
Total		2085	100.0		

How many children, under 18, live in your home?



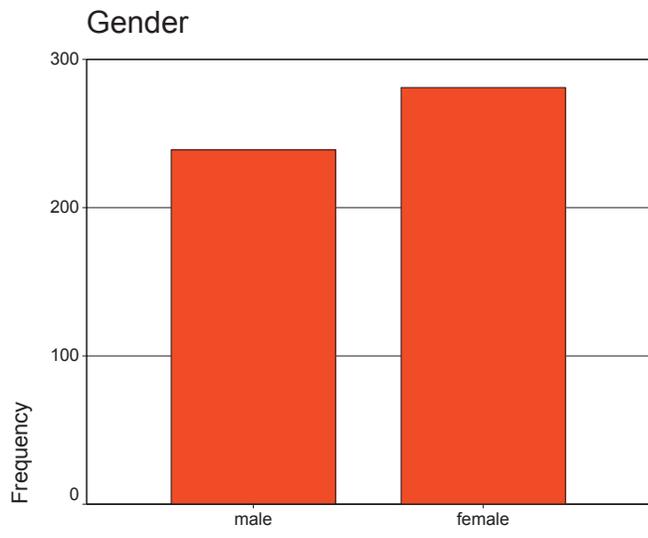
**Q-Income: Which of the following broad categories best describes your total household income?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid (\$1,000)	I:<10	23	1.1	4.4	4.4
	I:10-25	51	2.4	9.8	14.2
	I:25-40	88	4.2	16.9	31.1
	I:40-60	92	4.4	17.7	48.8
	I:>60	155	7.4	29.8	78.5
	don't know	26	1.2	5.0	83.5
	refused	86	4.1	16.5	100.0
Total		521	25.0	100.0	
Missing	System	1564	75.0		
Total		2085	100.0		



**Q-Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 male	239	11.5	46.0	46.0
	2 female	281	13.5	54.0	100.0
	Total	520	24.9	100.0	
Missing	System	1565	75.1		
Total		2085	100.0		



**Appendix B  
Other State DOT Research Offices  
Survey Results**

**Q1. About what percent of your research is conducted internally by members of your staff/DOT, or externally by others, such as university researchers, transportation centers, government agencies or consultants?**

**Q1A percent of research-internal<sup>a</sup>**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	4	9.8	10.0	10.0
	1	3	7.3	7.5	17.5
	2	1	2.4	2.5	20.0
	5	10	24.4	25.0	45.0
	6	1	2.4	2.5	47.5
	10	5	12.2	12.5	60.0
	15	1	2.4	2.5	62.5
	20	2	4.9	5.0	67.5
	25	3	7.3	7.5	75.0
	30	3	7.3	7.5	82.5
	35	1	2.4	2.5	85.0
	36	1	2.4	2.5	87.5
	45	1	2.4	2.5	90.0
	50	1	2.4	2.5	92.5
	52	1	2.4	2.5	95.0
	67	1	2.4	2.5	97.5
	70	1	2.4	2.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

a. Note: Most common percent groups are:

0-25    75%  
26-50   17%  
51-75   7%

**Q1B percent of research-external<sup>a</sup>**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30	1	2.4	2.5	2.5
	33	1	2.4	2.5	5.0
	48	1	2.4	2.5	7.5
	50	1	2.4	2.5	10.0
	55	1	2.4	2.5	12.5
	64	1	2.4	2.5	15.0
	65	1	2.4	2.5	17.5
	70	3	7.3	7.5	25.0
	75	3	7.3	7.5	32.5
	80	2	4.9	5.0	37.5
	85	1	2.4	2.5	40.0
	90	5	12.2	12.5	52.5
	94	1	2.4	2.5	55.0
	95	10	24.4	25.0	80.0
	98	1	2.4	2.5	82.5
	99	3	7.3	7.5	90.0
	100	4	9.8	10.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

a. Note: Most frequent percent groups:

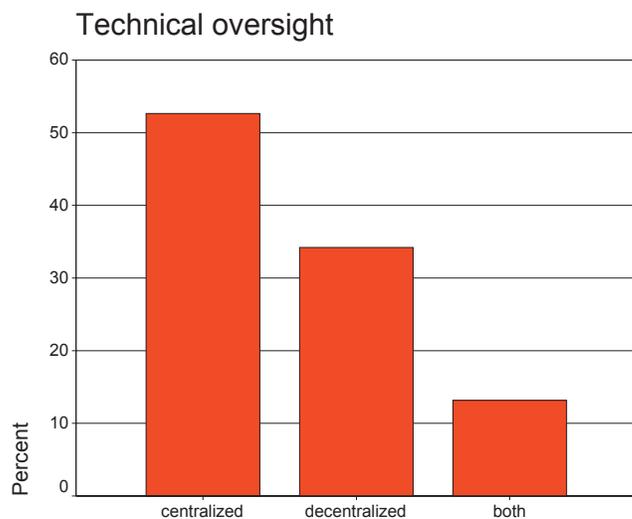
76-100 66%

51-75 22%

26-50 10%

**Q2. Is the technical oversight of the research program centralized (with activities such as project solicitation and project monitoring conducted by research office staff), or decentralized (and overseen by others in the agency, such as engineers)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 centralized	20	48.8	52.6	52.6
	2 decentralized	13	31.7	34.2	86.8
	3 both	5	12.2	13.2	100.0
	Total	38	92.7	100.0	
Missing	System	3	7.3		
Total		41	100.0		



**Q3. What percentage of your research expenditures are associated with each of the following?**

**Q3A percent of program-national<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	3	7.3	8.1	8.1
1	1	2.4	2.7	10.8
3	1	2.4	2.7	13.5
5	3	7.3	8.1	21.6
10	9	22.0	24.3	45.9
15	1	2.4	2.7	48.6
16	3	7.3	8.1	56.8
18	1	2.4	2.7	59.5
20	6	14.6	16.2	75.7
25	2	4.9	5.4	81.1
26	1	2.4	2.7	83.8
30	3	7.3	8.1	91.9
40	2	4.9	5.4	97.3
49	1	2.4	2.7	100.0
Total	37	90.2	100.0	
Missing System	4	9.8		
Total	41	100.0		

a. Note: Most common percent groups:

0-10 42%  
 11-20 27%  
 41-60 2%

**Q3B percent of program-regional<sup>a</sup>**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	10	24.4	29.4	29.4
	1	1	2.4	2.9	32.4
	2	1	2.4	2.9	35.3
	3	3	7.3	8.8	44.1
	5	3	7.3	8.8	52.9
	10	8	19.5	23.5	76.5
	12	1	2.4	2.9	79.4
	15	2	4.9	5.9	85.3
	20	4	9.8	11.8	97.1
	76	1	2.4	2.9	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

a. Note: Most frequent percent groups:

0-10 63%  
 11-20 17%  
 61-80 2%

**percent of program-state - a**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	4.9	5.3	5.3
	8	1	2.4	2.6	7.9
	40	1	2.4	2.6	10.5
	50	1	2.4	2.6	13.2
	55	1	2.4	2.6	15.8
	60	5	12.2	13.2	28.9
	64	1	2.4	2.6	31.6
	69	1	2.4	2.6	34.2
	70	3	7.3	7.9	42.1
	73	1	2.4	2.6	44.7
	75	2	4.9	5.3	50.0
	77	1	2.4	2.6	52.6
	79	1	2.4	2.6	55.3
	80	6	14.6	15.8	71.1
	81	1	2.4	2.6	73.7
	90	2	4.9	5.3	78.9
	95	5	12.2	13.2	92.1
	99	1	2.4	2.6	94.7
	100	2	4.9	5.3	100.0
	Total	38	92.7	100.0	
Missing	System	3	7.3		
Total		41	100.0		

a. Note Most Frequent Percent Group

60-80 51%  
 81-100 26%  
 0-50 13%

**Q4. What is your current annual research budget?**

**Q4A annual research budget-State Sp&R Monies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	6	14.6	15.0	15.0
143000	1	2.4	2.5	17.5
147650	1	2.4	2.5	20.0
150000	1	2.4	2.5	22.5
168000	1	2.4	2.5	25.0
259651	1	2.4	2.5	27.5
667000	1	2.4	2.5	30.0
683000	1	2.4	2.5	32.5
700000	1	2.4	2.5	35.0
753000	1	2.4	2.5	37.5
870000	1	2.4	2.5	40.0
947257	1	2.4	2.5	42.5
1000000	1	2.4	2.5	45.0
1001911	1	2.4	2.5	47.5
1200000	1	2.4	2.5	50.0
1304438	1	2.4	2.5	52.5
1400000	1	2.4	2.5	55.0
1514000	1	2.4	2.5	57.5
1800000	2	4.9	5.0	62.5
2000000	1	2.4	2.5	65.0
2260200	1	2.4	2.5	67.5
2300000	1	2.4	2.5	70.0
2600000	1	2.4	2.5	72.5
3200000	1	2.4	2.5	75.0
3600000	1	2.4	2.5	77.5
4000000	2	4.9	5.0	82.5
4200000	1	2.4	2.5	85.0
5051354	1	2.4	2.5	87.5
5264759	1	2.4	2.5	90.0
6200000	1	2.4	2.5	92.5
10200000	1	2.4	2.5	95.0
12000000	1	2.4	2.5	97.5
22200000	1	2.4	2.5	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

## Q4B annual research budget-other State Monies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	15	36.6	37.5	37.5
	5000	1	2.4	2.5	40.0
	50000	2	4.9	5.0	45.0
	60000	1	2.4	2.5	47.5
	150000	1	2.4	2.5	50.0
	160000	1	2.4	2.5	52.5
	165468	1	2.4	2.5	55.0
	200000	2	4.9	5.0	60.0
	378000	1	2.4	2.5	62.5
	500000	2	4.9	5.0	67.5
	669000	1	2.4	2.5	70.0
	700000	1	2.4	2.5	72.5
	740000	1	2.4	2.5	75.0
	800000	2	4.9	5.0	80.0
	1000000	1	2.4	2.5	82.5
	1598000	1	2.4	2.5	85.0
	2000000	2	4.9	5.0	90.0
	2500000	1	2.4	2.5	92.5
	4150000	1	2.4	2.5	95.0
	9550000	1	2.4	2.5	97.5
	80000000	1	2.4	2.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

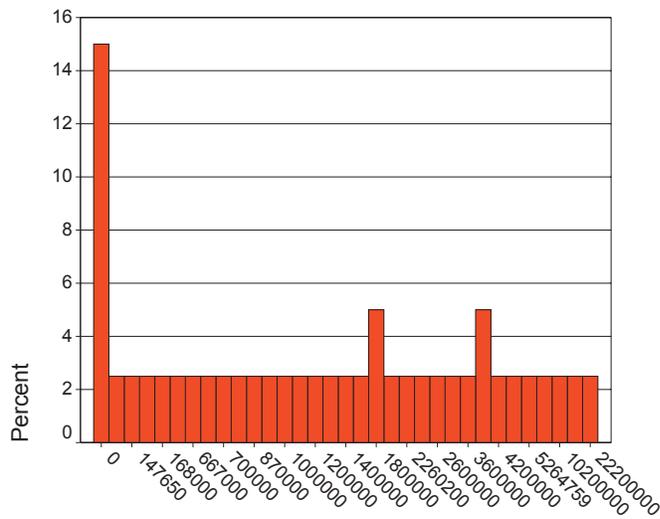
## Q4C annual research budget-pooled fund projects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	11	26.8	28.2	28.2
	20000	1	2.4	2.6	30.8
	29286	1	2.4	2.6	33.3
	30000	2	4.9	5.1	38.5
	100000	1	2.4	2.6	41.0
	130000	2	4.9	5.1	46.2
	150000	1	2.4	2.6	48.7
	190000	1	2.4	2.6	51.3
	200000	1	2.4	2.6	53.8
	275000	1	2.4	2.6	56.4
	295000	1	2.4	2.6	59.0
	300000	1	2.4	2.6	61.5
	309000	1	2.4	2.6	64.1
	350000	1	2.4	2.6	66.7
	400000	1	2.4	2.6	69.2
	485032	1	2.4	2.6	71.8
	500000	1	2.4	2.6	74.4
	600000	1	2.4	2.6	76.9
	875940	1	2.4	2.6	79.5
	932000	1	2.4	2.6	82.1
	1000000	3	7.3	7.7	89.7
	1310115	1	2.4	2.6	92.3
	1870000	1	2.4	2.6	94.9
	3200000	1	2.4	2.6	97.4
	10000000	1	2.4	2.6	100.0
	Total	39	95.1	100.0	
Missing	System	2	4.9		
Total		41	100.0		

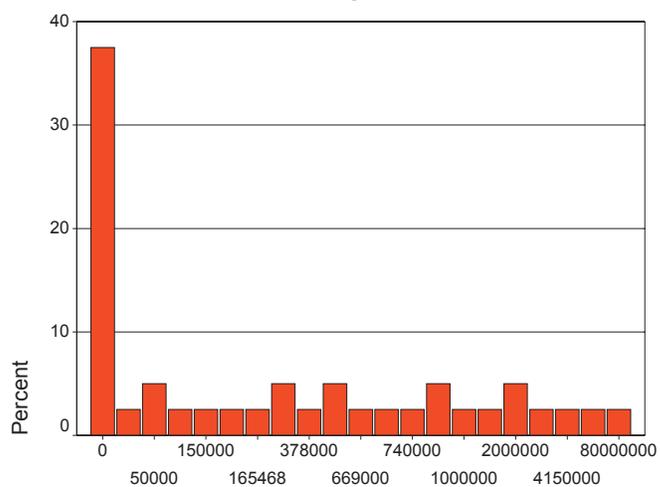
**Q4D annual research budget-federal**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	16	39.0	40.0	40.0
	95000	1	2.4	2.5	42.5
	140000	1	2.4	2.5	45.0
	264760	1	2.4	2.5	47.5
	300000	1	2.4	2.5	50.0
	450000	1	2.4	2.5	52.5
	536540	1	2.4	2.5	55.0
	600000	1	2.4	2.5	57.5
	880000	1	2.4	2.5	60.0
	900000	1	2.4	2.5	62.5
	932204	1	2.4	2.5	65.0
	947257	1	2.4	2.5	67.5
	1000000	2	4.9	5.0	72.5
	1038604	1	2.4	2.5	75.0
	1200000	1	2.4	2.5	77.5
	1390769	1	2.4	2.5	80.0
	2000000	2	4.9	5.0	85.0
	2100000	1	2.4	2.5	87.5
	2800000	1	2.4	2.5	90.0
	3100000	1	2.4	2.5	92.5
	3573000	1	2.4	2.5	95.0
	4700000	1	2.4	2.5	97.5
	5007866	1	2.4	2.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

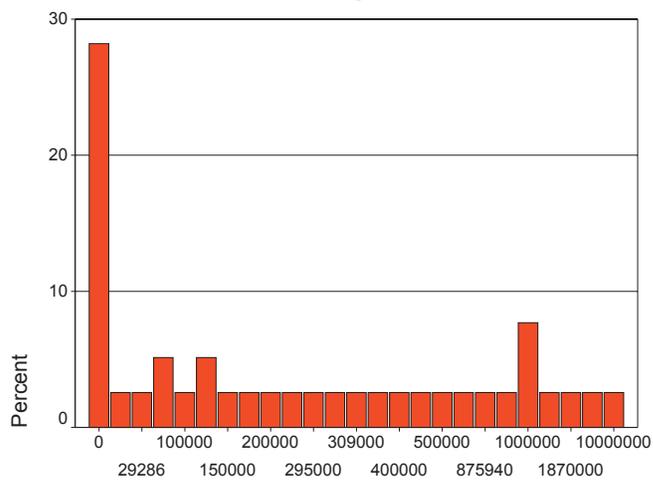
**Annual research budget-state Sp&R monies**



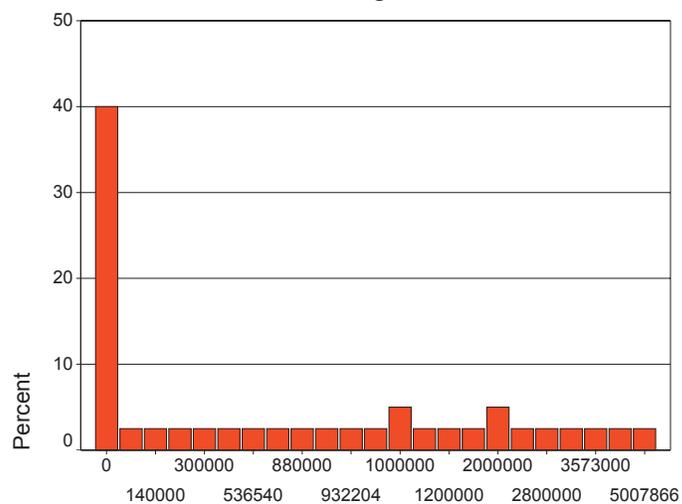
Annual research budget-other state monies



Annual research budget-pooled fund



Annual research budget-federal



**Q5. How many FTEs are employed in your research office in each of the following categories?**

**Q5A FTEs-administrative**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	9	22.0	22.0	22.0
1.0	13	31.7	31.7	53.7
1.5	1	2.4	2.4	56.1
2.0	6	14.6	14.6	70.7
2.5	1	2.4	2.4	73.2
3.0	4	9.8	9.8	82.9
4.0	1	2.4	2.4	85.4
5.0	1	2.4	2.4	87.8
7.0	1	2.4	2.4	90.2
8.0	1	2.4	2.4	92.7
9.0	1	2.4	2.4	95.1
10.0	1	2.4	2.4	97.6
15.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

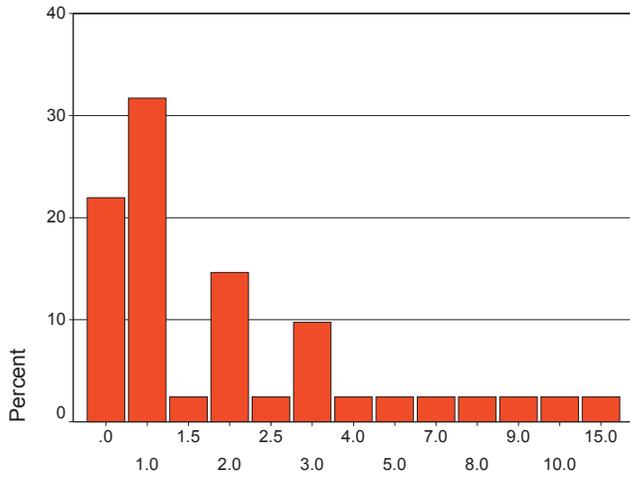
**Q5B FTEs-secretarial/clerical**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	14	34.1	34.1	34.1
.3	1	2.4	2.4	36.6
.5	2	4.9	4.9	41.5
1.0	18	43.9	43.9	85.4
2.0	4	9.8	9.8	95.1
3.0	1	2.4	2.4	97.6
5.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

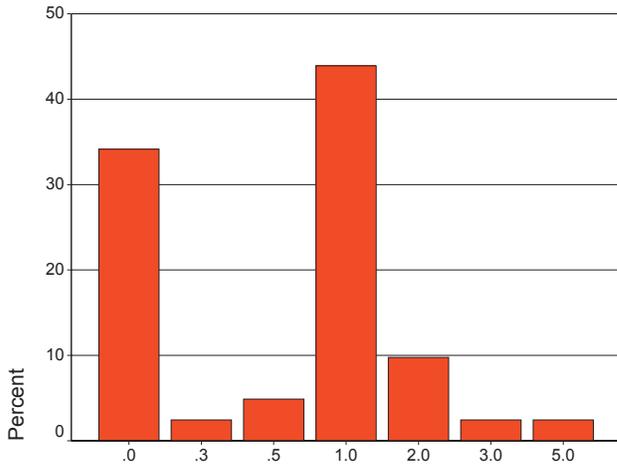
**Q5C FTEs-technical**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	9	22.0	22.5	22.5
.5	1	2.4	2.5	25.0
1.0	6	14.6	15.0	40.0
2.0	3	7.3	7.5	47.5
4.0	1	2.4	2.5	50.0
5.0	4	9.8	10.0	60.0
7.0	4	9.8	10.0	70.0
8.0	2	4.9	5.0	75.0
9.0	2	4.9	5.0	80.0
9.5	1	2.4	2.5	82.5
13.0	1	2.4	2.5	85.0
20.0	1	2.4	2.5	87.5
24.0	1	2.4	2.5	90.0
25.0	1	2.4	2.5	92.5
36.0	1	2.4	2.5	95.0
45.0	1	2.4	2.5	97.5
70.0	1	2.4	2.5	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

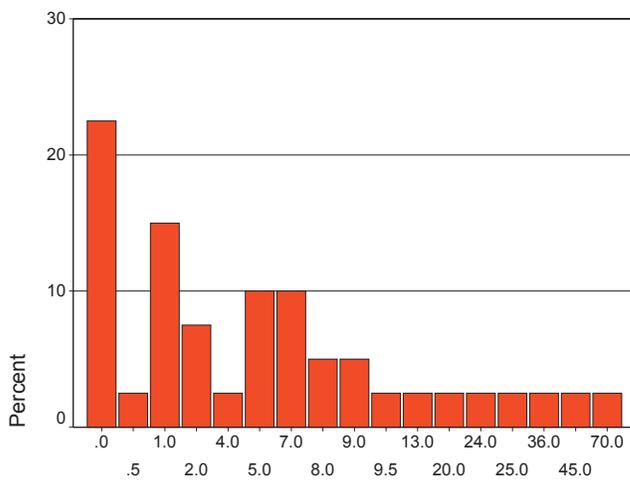
FTEs-administrative



FTEs-secretarial/clerical



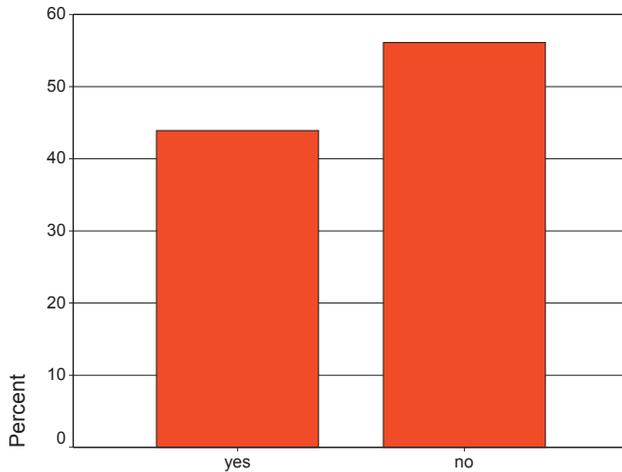
FTEs-technical



**Q6. Do any of your FTEs focus on marketing your research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	18	43.9	43.9	43.9
2 no	23	56.1	56.1	100.0
Total	41	100.0	100.0	

FTEs focused on marketing program

**Q7. Please rank the following phrases from 1 to 5, with 1 being least important and 5 being most important, to best describe your primary mission:****Q7A hearing problems through external constituents and solving them**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	4	9.8	11.8	11.8
2	9	22.0	26.5	38.2
3	10	24.4	29.4	67.6
4	7	17.1	20.6	88.2
5	4	9.8	11.8	100.0
Total	34	82.9	100.0	
Missing System	7	17.1		
Total	41	100.0		

**Q7B identifying the problems internally and solving them**

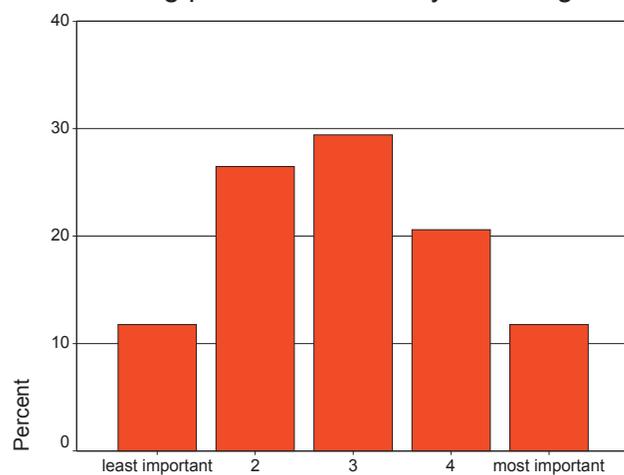
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	6	14.6	16.2	16.2
2	4	9.8	10.8	27.0
3	2	4.9	5.4	32.4
4	3	7.3	8.1	40.5
5	22	53.7	59.5	100.0
Total	37	90.2	100.0	
Missing System	4	9.8		
Total	41	100.0		

**Q7C serving as a technical resource**

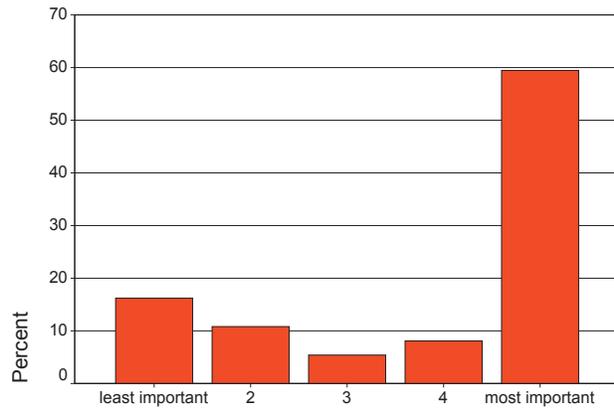
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	4.9	5.9	5.9
	2	3	7.3	8.8	14.7
	3	12	29.3	35.3	50.0
	4	11	26.8	32.4	82.4
	5	6	14.6	17.6	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

**Q7D attaining national recognition**

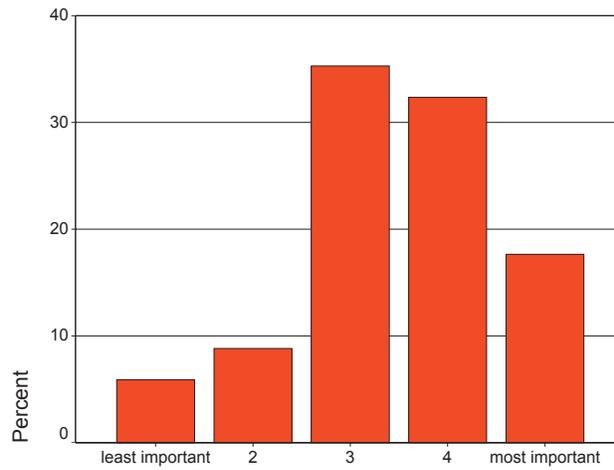
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	22.0	26.5	26.5
	2	9	22.0	26.5	52.9
	3	6	14.6	17.6	70.6
	4	6	14.6	17.6	88.2
	5	4	9.8	11.8	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

**Hearing problems externally & solving them**

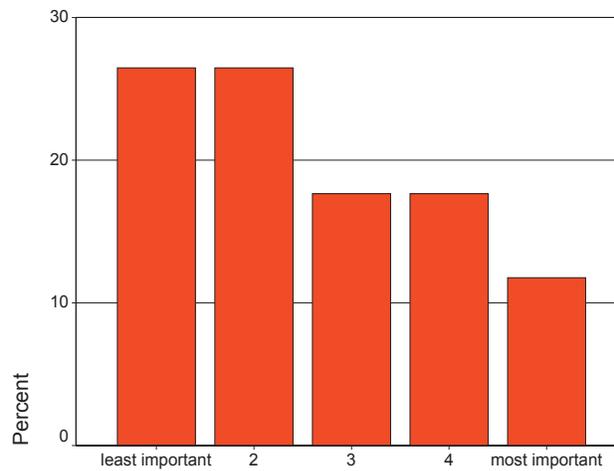
### Identifying problems internally and solving them



### Serving as a technical resource



### Attaining national recognition



**Q8. About what percent of your total research budget is spent in the following areas?**

**Q8A percent of research budget-traffic**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	9	22.0	22.0	22.0
2.0	1	2.4	2.4	24.4
3.0	1	2.4	2.4	26.8
4.0	1	2.4	2.4	29.3
4.2	1	2.4	2.4	31.7
5.0	11	26.8	26.8	58.5
6.0	1	2.4	2.4	61.0
6.3	1	2.4	2.4	63.4
7.0	1	2.4	2.4	65.9
8.0	2	4.9	4.9	70.7
9.0	1	2.4	2.4	73.2
10.0	6	14.6	14.6	87.8
11.0	1	2.4	2.4	90.2
20.0	1	2.4	2.4	92.7
21.0	2	4.9	4.9	97.6
25.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q8B percent of research budget-safety**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	9	22.0	22.0	22.0
2.0	1	2.4	2.4	24.4
2.5	1	2.4	2.4	26.8
3.0	3	7.3	7.3	34.1
3.5	1	2.4	2.4	36.6
5.0	9	22.0	22.0	58.5
6.0	1	2.4	2.4	61.0
6.3	1	2.4	2.4	63.4
8.0	2	4.9	4.9	68.3
9.0	1	2.4	2.4	70.7
10.0	5	12.2	12.2	82.9
12.0	1	2.4	2.4	85.4
13.0	1	2.4	2.4	87.8
15.0	1	2.4	2.4	90.2
20.0	3	7.3	7.3	97.6
31.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q8C percent of research budget-hydraulics**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	21	51.2	51.2	51.2
.1	1	2.4	2.4	53.7
1.0	1	2.4	2.4	56.1
2.0	2	4.9	4.9	61.0
3.0	2	4.9	4.9	65.9
5.0	9	22.0	22.0	87.8
7.0	1	2.4	2.4	90.2
10.0	3	7.3	7.3	97.6
40.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q8D percent of research budget-structures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	7	17.1	17.1	17.1
2.0	1	2.4	2.4	19.5
5.0	6	14.6	14.6	34.1
6.0	1	2.4	2.4	36.6
7.0	2	4.9	4.9	41.5
8.0	1	2.4	2.4	43.9
10.0	4	9.8	9.8	53.7
12.0	2	4.9	4.9	58.5
14.0	1	2.4	2.4	61.0
15.0	4	9.8	9.8	70.7
20.0	4	9.8	9.8	80.5
21.0	1	2.4	2.4	82.9
21.3	1	2.4	2.4	85.4
24.0	1	2.4	2.4	87.8
25.0	2	4.9	4.9	92.7
29.0	1	2.4	2.4	95.1
40.0	1	2.4	2.4	97.6
47.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q8E percent of research budget-planning**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	16	39.0	39.0	39.0
	.2	1	2.4	2.4	41.5
	1.0	1	2.4	2.4	43.9
	2.0	1	2.4	2.4	46.3
	4.0	2	4.9	4.9	51.2
	4.3	1	2.4	2.4	53.7
	5.0	8	19.5	19.5	73.2
	6.0	3	7.3	7.3	80.5
	6.3	1	2.4	2.4	82.9
	7.0	2	4.9	4.9	87.8
	8.0	1	2.4	2.4	90.2
	10.0	2	4.9	4.9	95.1
	12.0	1	2.4	2.4	97.6
	16.0	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

**Q8F percent of research budget-management issues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	15	36.6	36.6	36.6
	2.0	3	7.3	7.3	43.9
	4.0	1	2.4	2.4	46.3
	5.0	8	19.5	19.5	65.9
	6.3	1	2.4	2.4	68.3
	8.0	2	4.9	4.9	73.2
	10.0	3	7.3	7.3	80.5
	15.0	1	2.4	2.4	82.9
	20.0	2	4.9	4.9	87.8
	21.0	1	2.4	2.4	90.2
	26.0	1	2.4	2.4	92.7
	31.0	1	2.4	2.4	95.1
	33.0	1	2.4	2.4	97.6
	34.0	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

**Q8G percent of research budget-geometrics of design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	20	48.8	50.0	50.0
	.2	1	2.4	2.5	52.5
	1.0	1	2.4	2.5	55.0
	1.5	1	2.4	2.5	57.5
	2.0	3	7.3	7.5	65.0
	3.0	1	2.4	2.5	67.5
	5.0	7	17.1	17.5	85.0
	7.0	1	2.4	2.5	87.5
	9.0	1	2.4	2.5	90.0
	10.0	1	2.4	2.5	92.5
	20.0	1	2.4	2.5	95.0
	21.0	1	2.4	2.5	97.5
	22.0	1	2.4	2.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q8H percent of research budget-materials or pavements**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	5	12.2	12.2	12.2
	.3	1	2.4	2.4	14.6
	5.0	1	2.4	2.4	17.1
	9.0	2	4.9	4.9	22.0
	10.0	3	7.3	7.3	29.3
	12.0	2	4.9	4.9	34.1
	15.0	6	14.6	14.6	48.8
	18.0	1	2.4	2.4	51.2
	20.0	8	19.5	19.5	70.7
	23.0	1	2.4	2.4	73.2
	26.0	1	2.4	2.4	75.6
	28.0	1	2.4	2.4	78.0
	29.0	1	2.4	2.4	80.5
	30.0	2	4.9	4.9	85.4
	35.0	1	2.4	2.4	87.8
	44.4	1	2.4	2.4	90.2
	50.0	1	2.4	2.4	92.7
	51.0	1	2.4	2.4	95.1
	56.0	1	2.4	2.4	97.6
	60.0	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

**Q8I percent of research budget-construction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	16	39.0	39.0	39.0
	1.0	3	7.3	7.3	46.3
	1.8	1	2.4	2.4	48.8
	2.0	1	2.4	2.4	51.2
	3.0	1	2.4	2.4	53.7
	4.0	1	2.4	2.4	56.1
	5.0	8	19.5	19.5	75.6
	8.0	2	4.9	4.9	80.5
	10.0	6	14.6	14.6	95.1
	12.0	1	2.4	2.4	97.6
	25.0	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

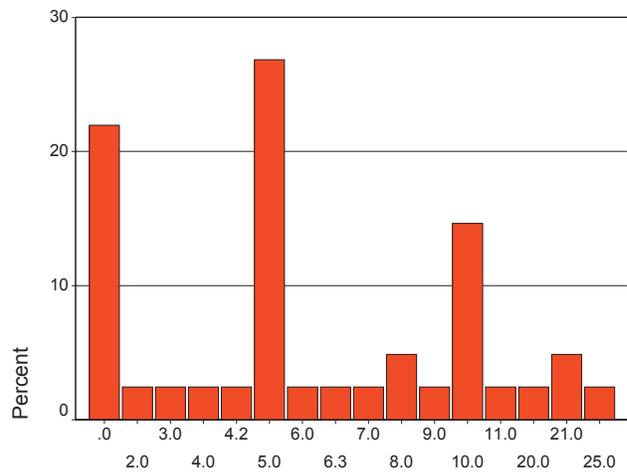
**Q8J percent of research budget-environmental issues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	12	29.3	29.3	29.3
	.1	1	2.4	2.4	31.7
	.5	1	2.4	2.4	34.1
	2.0	1	2.4	2.4	36.6
	3.0	1	2.4	2.4	39.0
	4.0	1	2.4	2.4	41.5
	5.0	7	17.1	17.1	58.5
	7.0	1	2.4	2.4	61.0
	8.0	1	2.4	2.4	63.4
	9.0	3	7.3	7.3	70.7
	10.0	3	7.3	7.3	78.0
	12.0	1	2.4	2.4	80.5
	14.0	1	2.4	2.4	82.9
	15.0	3	7.3	7.3	90.2
	20.0	1	2.4	2.4	92.7
	36.0	1	2.4	2.4	95.1
	40.0	1	2.4	2.4	97.6
	45.0	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

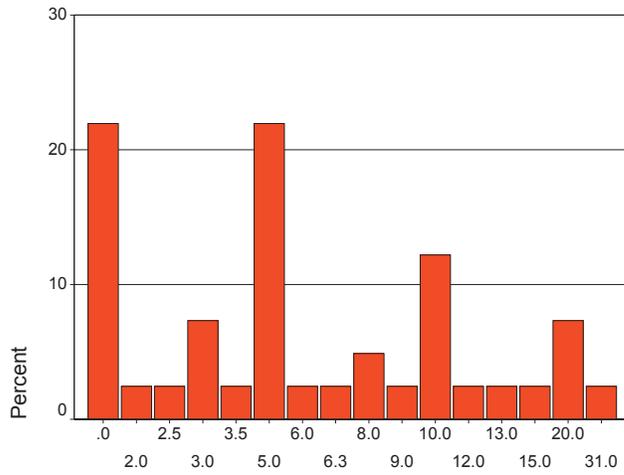
**Q8K percent of research budget-other areas**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .0	17	41.5	41.5	41.5
.2	1	2.4	2.4	43.9
1.0	2	4.9	4.9	48.8
3.0	1	2.4	2.4	51.2
5.0	2	4.9	4.9	56.1
7.0	1	2.4	2.4	58.5
9.0	1	2.4	2.4	61.0
10.0	2	4.9	4.9	65.9
17.0	1	2.4	2.4	68.3
19.0	1	2.4	2.4	70.7
20.0	2	4.9	4.9	75.6
21.0	2	4.9	4.9	80.5
24.0	1	2.4	2.4	82.9
25.0	2	4.9	4.9	87.8
27.0	1	2.4	2.4	90.2
30.0	1	2.4	2.4	92.7
35.0	1	2.4	2.4	95.1
42.0	1	2.4	2.4	97.6
100.0	1	2.4	2.4	100.0
Total	41	100.0	100.0	

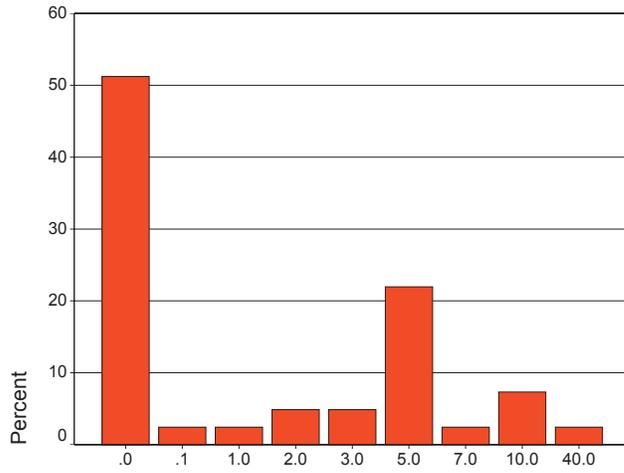
**Percent of research budget-traffic**



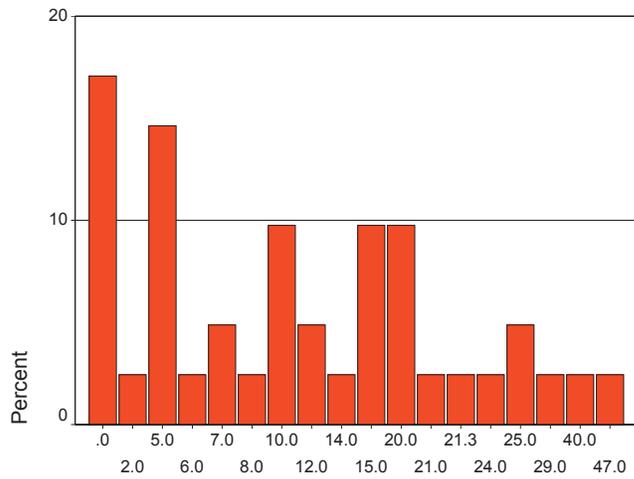
Percent of research budget-safety



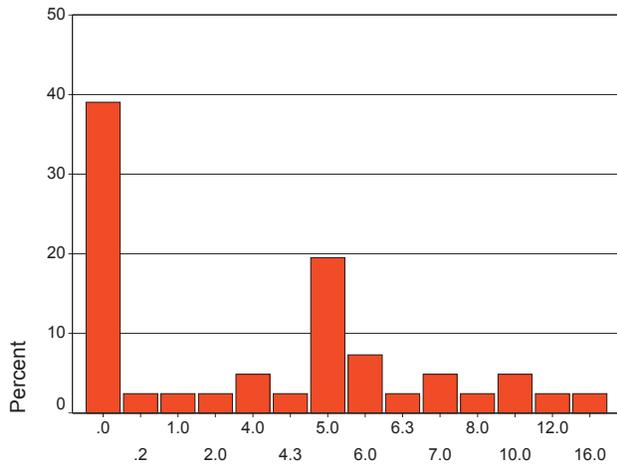
Percent of research budget-hydraulics



Percent of research budget-structures

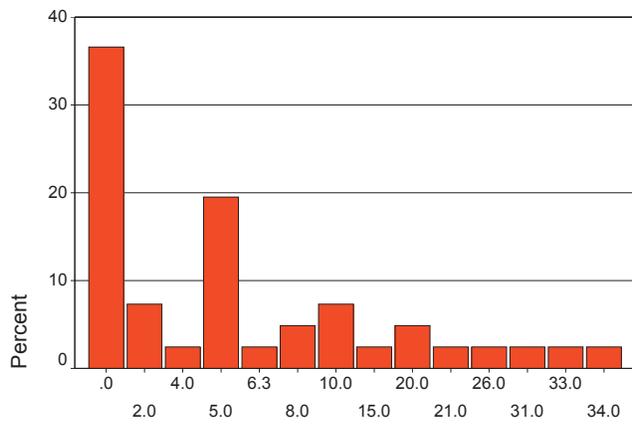


Percent of research budget-planning



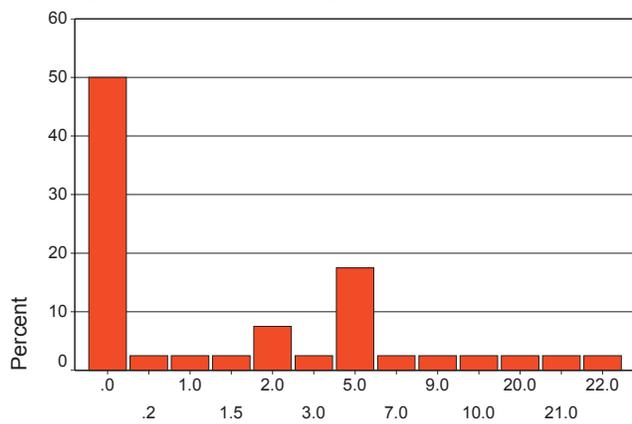
Percent of research budget

-management issues

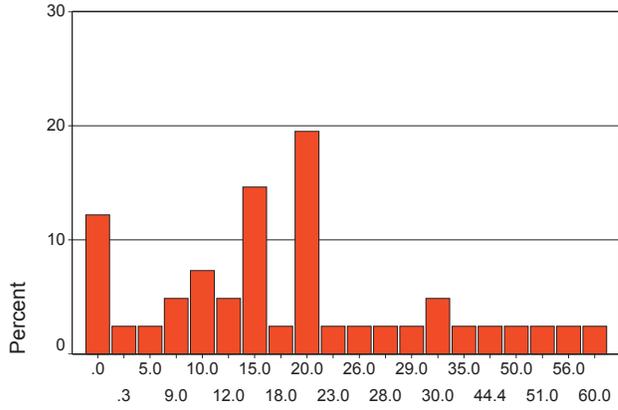


Percent of research budget

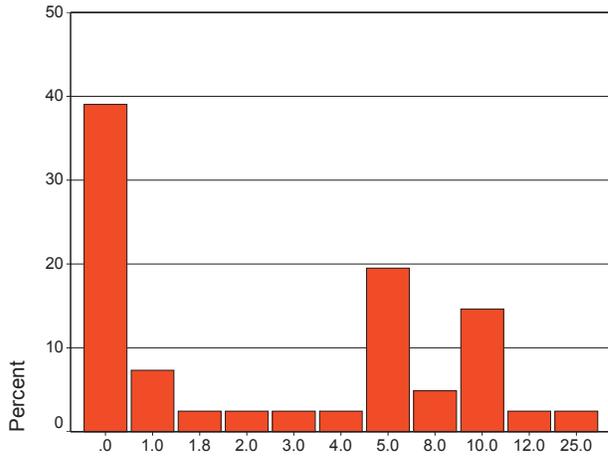
-geometrics of design



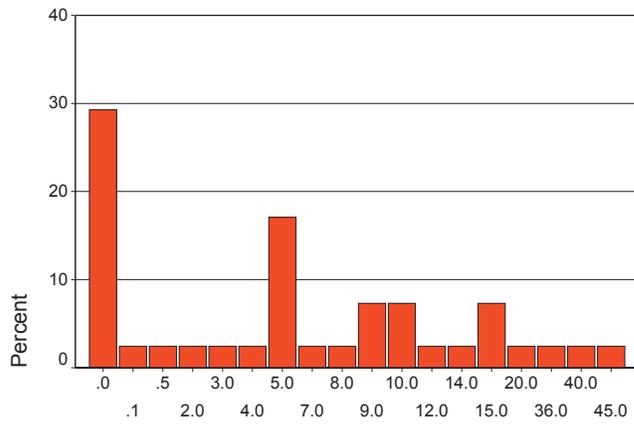
Percent of research budget-materials  
or pavements

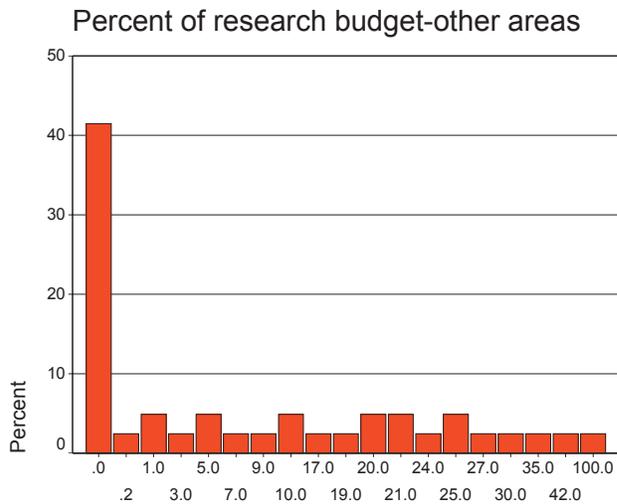


Percent of research budget-construction



Percent of research budget-environmental  
issues





**Q9. About what percent of your research projects have the following primary scope?**

**Q9A percent of projects-literature reviews or syntheses**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	9	22.0	26.5	26.5
	1	1	2.4	2.9	29.4
	2	1	2.4	2.9	32.4
	3	1	2.4	2.9	35.3
	4	2	4.9	5.9	41.2
	5	7	17.1	20.6	61.8
	7	1	2.4	2.9	64.7
	10	9	22.0	26.5	91.2
	20	1	2.4	2.9	94.1
	75	1	2.4	2.9	97.1
	80	1	2.4	2.9	100.0
	Total		34	82.9	100.0
Missing	System	7	17.1		
Total		41	100.0		

**Q9B percent of projects-paper studies**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	17.1	20.6	20.6
	1	1	2.4	2.9	23.5
	2	2	4.9	5.9	29.4
	4	1	2.4	2.9	32.4
	5	7	17.1	20.6	52.9
	10	7	17.1	20.6	73.5
	15	2	4.9	5.9	79.4
	20	3	7.3	8.8	88.2
	22	1	2.4	2.9	91.2
	24	1	2.4	2.9	94.1
	30	1	2.4	2.9	97.1
	45	1	2.4	2.9	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

**Q9C percent of projects-laboratory studies**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	4.9	5.9	5.9
	5	2	4.9	5.9	11.8
	10	4	9.8	11.8	23.5
	14	1	2.4	2.9	26.5
	15	2	4.9	5.9	32.4
	22	1	2.4	2.9	35.3
	25	4	9.8	11.8	47.1
	30	4	9.8	11.8	58.8
	33	1	2.4	2.9	61.8
	35	3	7.3	8.8	70.6
	39	2	4.9	5.9	76.5
	40	2	4.9	5.9	82.4
	45	3	7.3	8.8	91.2
	60	1	2.4	2.9	94.1
	65	1	2.4	2.9	97.1
	75	1	2.4	2.9	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

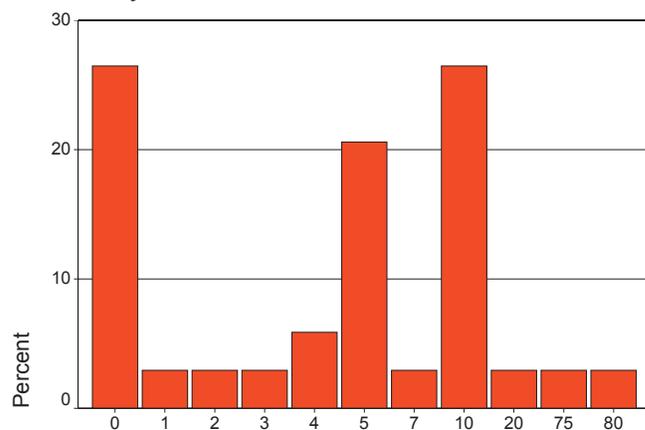
**Q9D percent of projects-field studies**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	1	2.4	2.9	2.9
	15	1	2.4	2.9	5.9
	20	2	4.9	5.9	11.8
	25	2	4.9	5.9	17.6
	30	5	12.2	14.7	32.4
	35	3	7.3	8.8	41.2
	40	5	12.2	14.7	55.9
	41	1	2.4	2.9	58.8
	42	1	2.4	2.9	61.8
	45	2	4.9	5.9	67.6
	49	1	2.4	2.9	70.6
	50	4	9.8	11.8	82.4
	53	1	2.4	2.9	85.3
	55	2	4.9	5.9	91.2
	60	2	4.9	5.9	97.1
	80	1	2.4	2.9	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

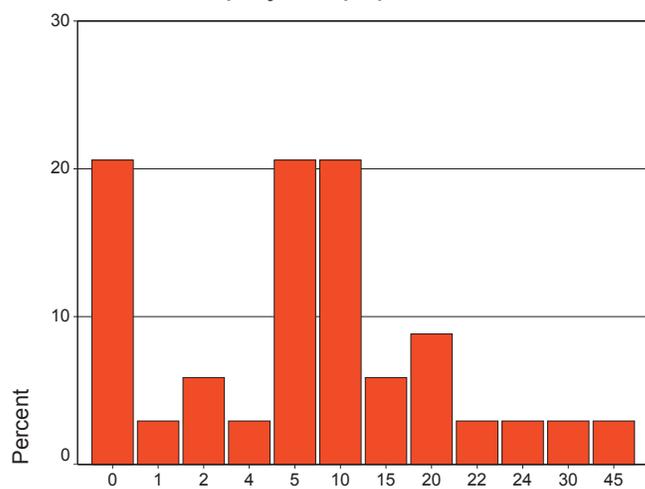
**Q9E percent of projects-development projects**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	4.9	5.9	5.9
	1	1	2.4	2.9	8.8
	5	6	14.6	17.6	26.5
	6	1	2.4	2.9	29.4
	10	8	19.5	23.5	52.9
	11	1	2.4	2.9	55.9
	19	1	2.4	2.9	58.8
	20	5	12.2	14.7	73.5
	25	1	2.4	2.9	76.5
	30	4	9.8	11.8	88.2
	35	2	4.9	5.9	94.1
	40	1	2.4	2.9	97.1
	65	1	2.4	2.9	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

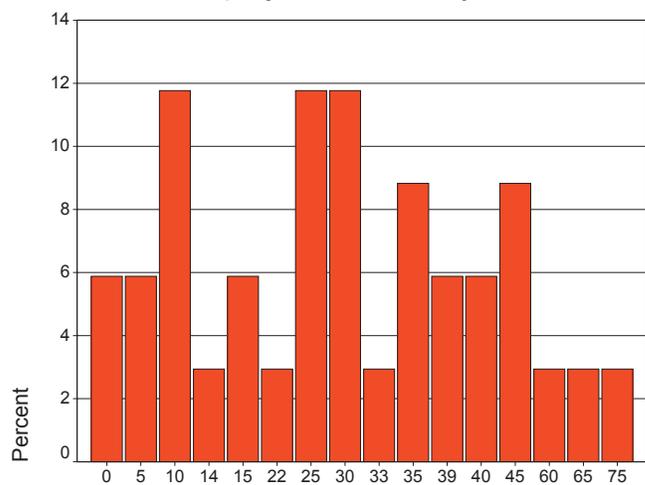
Percent of projects-literature reviews  
or syntheses



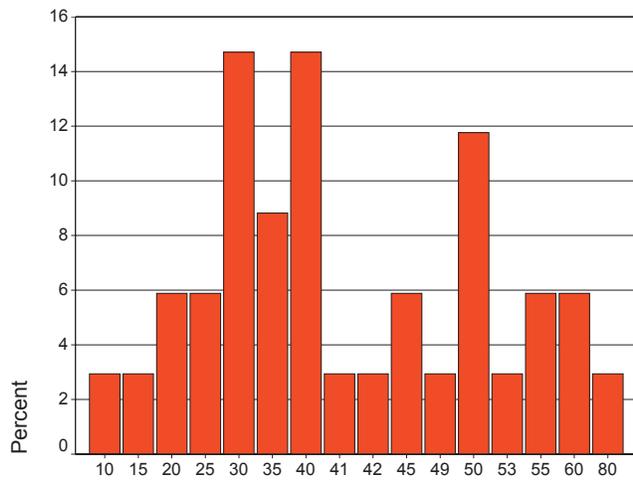
Percent of projects-paper studies



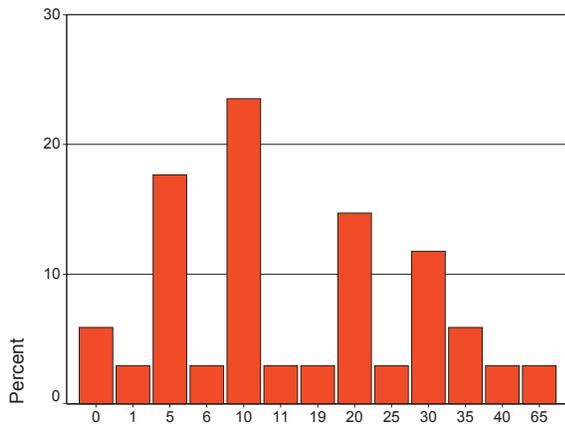
Percent of projects-laboratory studies



Percent of projects-field studies



Percent of projects-development projects



**Q10. With which of the following constituents/customers do you regularly communicate, and what are the primary purposes for doing so:**

**communicate with other DOTs**

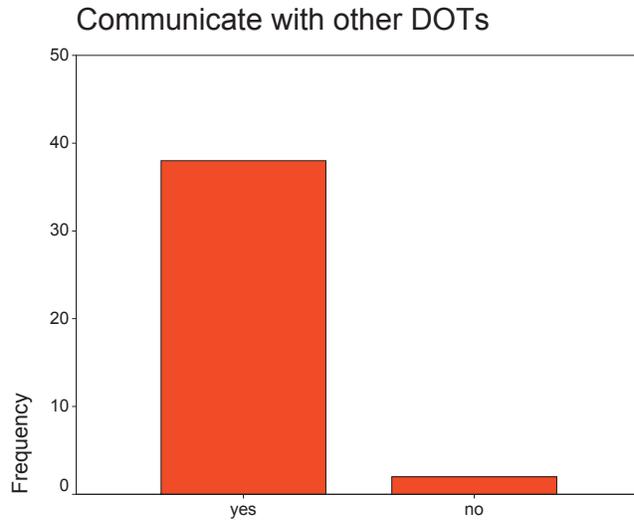
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	38	92.7	95.0	95.0
	no	2	4.9	5.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

Q10A1 communication purposes<sup>a</sup>

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	26.8	26.8	26.8
Compare data-order report	1	2.4	2.4	29.3
Discuss research management, their research, pooled fund projects	1	2.4	2.4	31.7
disseminate research results.	1	2.4	2.4	34.1
Communications for pooled-fund efforts	1	2.4	2.4	36.6
exchange of information & surveys	1	2.4	2.4	39.0
how they've approached problems similar to ours	1	2.4	2.4	41.5
info exchange	1	2.4	2.4	43.9
Information exchange, participate in pooled-fund efforts, peer exchange	1	2.4	2.4	46.3
information exchange, find out what practices are being employed, specification inquiry, soliciting pool fund partners	1	2.4	2.4	48.8
Information requests	1	2.4	2.4	51.2
information sharing	1	2.4	2.4	53.7
national RAC questions, surveys, literature searches, state of practice	1	2.4	2.4	56.1
partnerships	1	2.4	2.4	58.5
pooled fund deals, information resuests regarding BMPs. research program management	1	2.4	2.4	61.0
pooled fund projects, share results of state research	1	2.4	2.4	63.4
potential pooled fund research	1	2.4	2.4	65.9
potential pooled fund studies, RAC issues	1	2.4	2.4	68.3
regional, national mectroys, various research issues	1	2.4	2.4	70.7
Request information	1	2.4	2.4	73.2
research and implementation collaboration; information exchange; pool funds for research	1	2.4	2.4	75.6
Respond to and initiate request for information, reports and participation in research projects	1	2.4	2.4	78.0
See what they have done	1	2.4	2.4	80.5
Share findings, best practices	1	2.4	2.4	82.9
survey questions	1	2.4	2.4	85.4
surveys, technical input, share information, customer relations	1	2.4	2.4	87.8
T2 of research results, Reports, etc	1	2.4	2.4	90.2
technology transfer	1	2.4	2.4	92.7
their research activities, surveys and literature review	1	2.4	2.4	95.1
to gather information, solicit project support, share progress notes	1	2.4	2.4	97.6
to learn best practice	1	2.4	2.4	100.0
transmit and request reports; answer surveys	1	2.4	2.4	
Total	41	100.0	100.0	

a. Note: Most common other DOT communication purposes:

info exchange: 66%  
pooled fund partners: 33%  
research activities: 10%



**contractor associations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	20	48.8	48.8	48.8
no	21	51.2	51.2	100.0
Total	41	100.0	100.0	

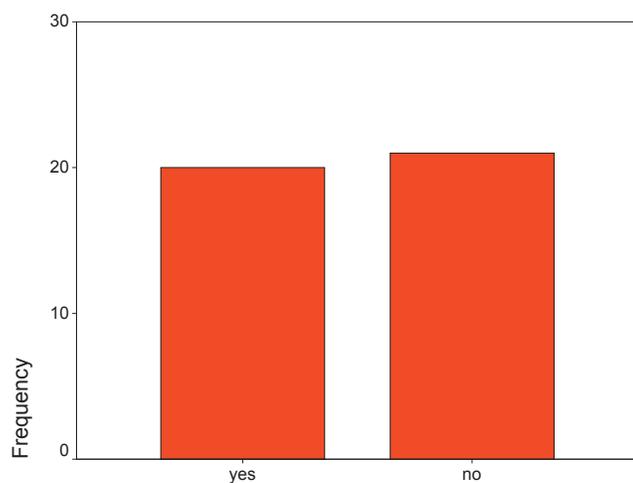
Q10B1 contractor assn. communication purposes<sup>a</sup>

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26	63.4	63.4	63.4
contract through joint industry/state task force on HMA paving	1	2.4	2.4	65.9
Current research, future project possibilities	1	2.4	2.4	68.3
determine needs	1	2.4	2.4	70.7
Find out what are NE's biggest problems	1	2.4	2.4	73.2
pavement, materials, construction	1	2.4	2.4	75.6
potential projects/new projects	1	2.4	2.4	78.0
project selection and development, training and conferences	1	2.4	2.4	80.5
research needs identification and serve on technical commiittees	1	2.4	2.4	82.9
Share findings, best practivces; identify needs	1	2.4	2.4	85.4
solicit problem statements and/or proposals	1	2.4	2.4	87.8
solve problems	1	2.4	2.4	90.2
specification change negotiation, soliciting industry partners in research, inquiring as to the necessity of proposed research, requesting membership for project technical advisory committees	1	2.4	2.4	92.7
specifications(not research function, but collateral duty of research staff)	1	2.4	2.4	95.1
technology transfer	1	2.4	2.4	97.6
to gather information, solicit project support, share progress notes	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a. Note: most common contractor assn. communication purposes:

project possibilities: 33%  
 solve problems: 20%  
 ID needs: 20%

## Contractor associations



**consultants**

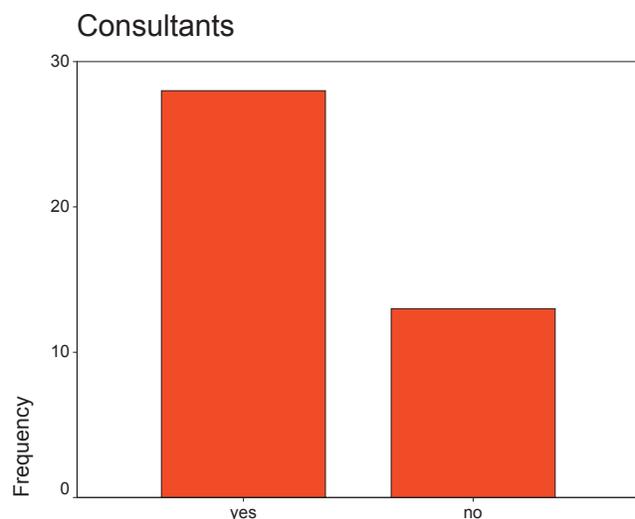
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	28	68.3	68.3	68.3
no	13	31.7	31.7	100.0
Total	41	100.0	100.0	

**Q10C1 consultant communication purposes<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15	36.6	36.6	36.6
Assist consultants working on NYSDOT projects w/ research needs	1	2.4	2.4	39.0
Contract administration	1	2.4	2.4	41.5
contracted research, testing/inspection	1	2.4	2.4	43.9
determine needs	1	2.4	2.4	46.3
development & conduct of research	1	2.4	2.4	48.8
Find out what are NE's biggest problems	1	2.4	2.4	51.2
Issue RFPs, receive findings	1	2.4	2.4	53.7
managing contracts	1	2.4	2.4	56.1
mostly talk about GIS information and environmental issues	1	2.4	2.4	58.5
project-related communications and coordination	1	2.4	2.4	61.0
project management, customer relations	1	2.4	2.4	63.4
project selection, development and manangement	1	2.4	2.4	65.9
provide products that support implementation	1	2.4	2.4	68.3
rarely, for project management purposes	1	2.4	2.4	70.7
research need identification and serve on technical committees	1	2.4	2.4	73.2
research projects	1	2.4	2.4	75.6
resources for the program	1	2.4	2.4	80.5
RFP's	1	2.4	2.4	82.9
solicit problem statements and/or proposals	1	2.4	2.4	85.4
Solicit responses to RFPs, prject correspondence, respond to requests for information	1	2.4	2.4	87.8
soliciting research proposals, requesting membership for TACs, knowledge exchange, technical transfer activities	1	2.4	2.4	90.2
solve problems	1	2.4	2.4	92.7
technology transfer	1	2.4	2.4	95.1
To discuss projects being undertaken	1	2.4	2.4	97.6
to gather information, solicit project support, share progress notes	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a. Note: most common consultant communication purposes:

project selection: 31%  
 solve problems: 23%  
 tech transfer: 8%



**universities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	40	97.6	97.6	97.6
no	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q10D1 university communication purposes<sup>a</sup>**

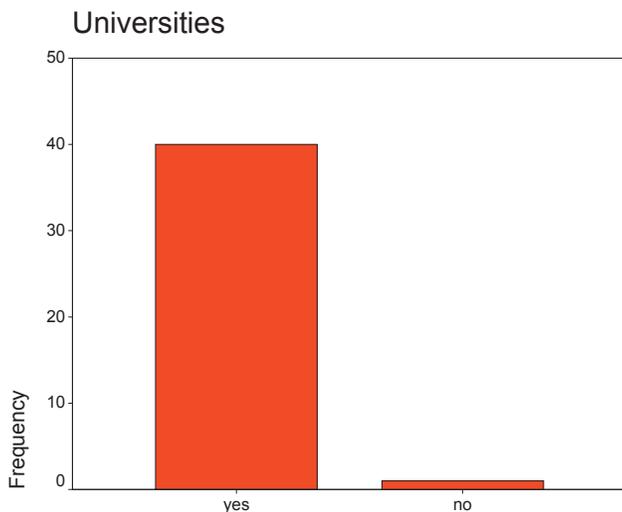
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	22.0	22.0	22.0
administer research program(99% of TxDOT research is conducted by state-supported universities)	1	2.4	2.4	24.4
collaborate;identify potential research;contract for research, implementation and training services	1	2.4	2.4	26.8
conduct research and tech transfer	1	2.4	2.4	29.3
conduct research studies	1	2.4	2.4	31.7
Contract administration	1	2.4	2.4	34.1
contract research	1	2.4	2.4	36.6
contracted research, website design, technology transfer	1	2.4	2.4	39.0
coordinate research program/conduct studies	1	2.4	2.4	41.5
Developed problem statements	1	2.4	2.4	43.9
development & conduct of research	1	2.4	2.4	46.3
Discuss ongoing projects and future research projects	1	2.4	2.4	48.8
Interface with university transportation research centers(TTI, Sahre Research reports & results)	1	2.4	2.4	51.2
Issue RFPs, receive findings	1	2.4	2.4	53.7
Managing research & exchange of information	1	2.4	2.4	56.1
monitor projects, solicit problem statements and/or proposals	1	2.4	2.4	58.5
new research opportunities	1	2.4	2.4	61.0

**Q10D1 university communication purposes<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid program partner	1	2.4	2.4	63.4
Project Management	1	2.4	2.4	65.9
project management, share information, customer relations	1	2.4	2.4	68.3
Project oversight, contract administration	1	2.4	2.4	70.7
project selection, development and management, training and conferences	1	2.4	2.4	73.2
project solicitation, project managment and implementation	1	2.4	2.4	75.6
research needs identification, invite proposals for research needs and ask for technical guidance	1	2.4	2.4	78.0
research projects	1	2.4	2.4	80.5
research projects and programs	1	2.4	2.4	82.9
Respond to and initiate requests for information, reports and participation in research prjects. Solicit responses to RFPs; project related correspondence, technical consultation, etc	1	2.4	2.4	85.4
RFP's, internships, speakers	1	2.4	2.4	87.8
soliciting research proposals, requesting membership for TACs, knowledge exchange, technical transfer activities, seeking future MSDOT research division employees	1	2.4	2.4	90.2
T2 Center, Research projects	1	2.4	2.4	92.7
To discuss projects being undertaken	1	2.4	2.4	95.1
to promote research collaboration, colicit and monitor work	1	2.4	2.4	97.6
university contract research program	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a. Note: most comon university communication purposes:

conduct research: 41%  
 manage projects: 34%  
 program partners: 16%



## internal division offices

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	37	90.2	90.2	90.2
no	4	9.8	9.8	100.0
Total	41	100.0	100.0	

## Q10E1 internal division communication purposes

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	26.8	26.8	26.8
customer service	1	2.4	2.4	29.3
determine needs, check study oversight	1	2.4	2.4	31.7
development & conduct of research, providing tech. support1	1	2.4	2.4	34.1
disseminate research results, coordinate implementation activities	1	2.4	2.4	36.6
IDEA submissions (potential projects)	1	2.4	2.4	39.0
identification of research needs, input related to participation in pooled fund studies or evaluating problem statements	1	2.4	2.4	41.5
Identify needs, communicate results, innovations, progress of research, strategies for locating technical information	1	2.4	2.4	43.9
identify research needs; participate on technical committees; provide technical assistance	1	2.4	2.4	46.3
Informational, research projects, questions	1	2.4	2.4	48.8
Input on current projects, research needs, developing projects	1	2.4	2.4	51.2
monitor projects; solicit problem statements; evaluate proposals	1	2.4	2.4	53.7
ongoing research sponsored by that office	1	2.4	2.4	56.1
proj.mgmt., solicitation, providing technical resource	1	2.4	2.4	58.5
project selection, development and manangement	1	2.4	2.4	61.0
project solicitation, needs assessment	1	2.4	2.4	63.4
provide literature searches, information access, respond to reference inquiries, assist with research focus	1	2.4	2.4	65.9
Research advisory committees	1	2.4	2.4	68.3
research needs and projects	1	2.4	2.4	70.7
Research needs identification, invite experts for memberships in study advisory committees and satisfy the need of specialized testing	1	2.4	2.4	73.2
research needs, technical input, share information, customer relations	1	2.4	2.4	75.6
Respond to and initiate requests for information, reports and participation in research prjects. Identify research needs and strategic research plan; develop RFPs; project related correspondence, technical consultation, etc	1	2.4	2.4	78.0

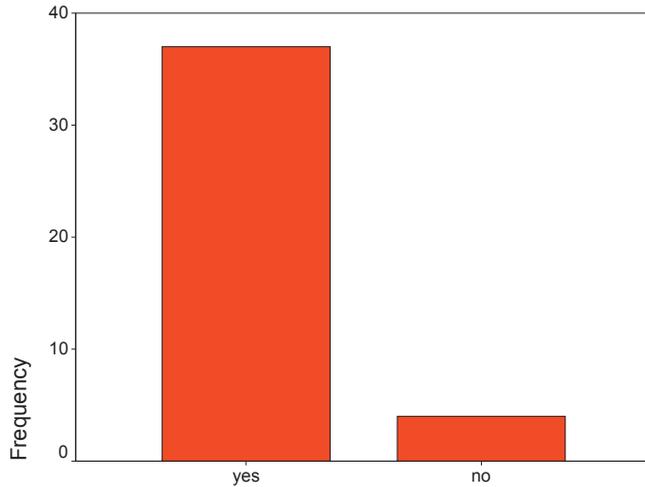
**Q10E1 internal division communication purposes**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid respond to their critical needs	1	2.4	2.4	80.5
share research results, identify research needs, provide technical expertise to guide research, lead implementation efforts	1	2.4	2.4	82.9
solicit research needs and dispense technology transfer material and conduct annual research showcase	1	2.4	2.4	85.4
solve prob, info exchange	1	2.4	2.4	87.8
support research needs	1	2.4	2.4	90.2
Technical advisory committees	1	2.4	2.4	92.7
technology transfer and research implementation	1	2.4	2.4	95.1
to determine research needs, share results	1	2.4	2.4	97.6
To review and discuss projects for which internal offices are the engineers	1	2.4	2.4	100.0
Total	41	100.0	100.0	

aNote: most common internal division communication purposes:

- ID research needs: 23%
- monitor projects: 23%
- tech transfer/resource: 23%
- disseminate research results: 20%
- advisory committees: 13%

**Internal division offices**



**district/regional offices**

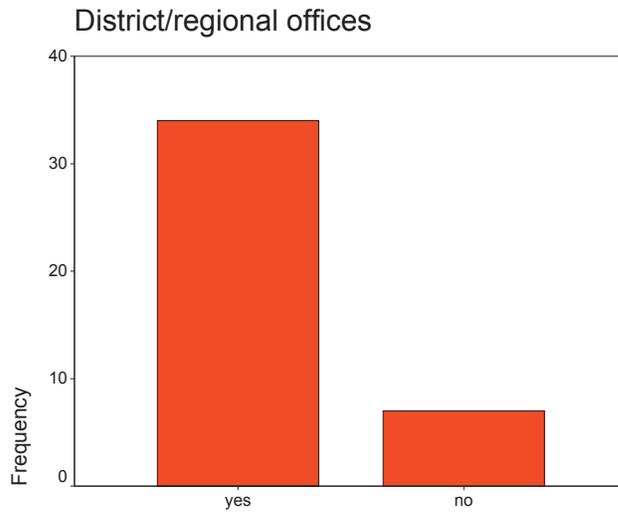
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	34	82.9	82.9	82.9
no	7	17.1	17.1	100.0
Total	41	100.0	100.0	

## Q10F1 district/regional office communication purposes

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12	29.3	29.3	29.3
coordinating contacts with local governments, share research results	1	2.4	2.4	31.7
Current research, recent findings- need to do more	1	2.4	2.4	34.1
customer service	1	2.4	2.4	36.6
determine needs, check study oversight	1	2.4	2.4	39.0
development & conduct of research	1	2.4	2.4	41.5
disseminate research results, coordinate implementation activities	1	2.4	2.4	43.9
field evaluations	1	2.4	2.4	46.3
identification of research needs, experimental field trials	1	2.4	2.4	48.8
Identify needs, communicate results, innovations, progress of research, strategies for locating technical information	1	2.4	2.4	51.2
info exchange, solve prob	1	2.4	2.4	53.7
Informational, research, questions, requests	1	2.4	2.4	56.1
maintenance issues and construction	1	2.4	2.4	58.5
monitor projects, solicit problem statements; evaluate proposals	1	2.4	2.4	61.0
project selection, development and management, assistance with test sites and locations	1	2.4	2.4	63.4
research needs and projects	1	2.4	2.4	65.9
research needs identification, invite experts for memberships in study advisory committees and satisfy the need of specialized testing	1	2.4	2.4	68.3
research needs, technical input, share information, customer relations	1	2.4	2.4	70.7
Respond to and initiate requests for information, reports and participation in research projects. Identify research needs; develop RFPs; project related correspondence, technical consultation, etc	1	2.4	2.4	73.2
Respond to requests	1	2.4	2.4	75.6
respond to their critical needs	1	2.4	2.4	78.0
same as above	1	2.4	2.4	80.5
same as division offices	1	2.4	2.4	82.9
same as for internal division offices	1	2.4	2.4	85.4
solicit problem statements, training	1	2.4	2.4	87.8
solicit research needs and dispense technology transfer material and conduct annual research showcase	1	2.4	2.4	90.2
support research needs	1	2.4	2.4	92.7
Technical advisory committees	1	2.4	2.4	95.1
technology transfer and research implementation	1	2.4	2.4	97.6
to determine research needs, share results	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a Note: Most common purposes:

identify research needs	44%
monitor projects	7%
info exchange	5%
solve tech problems	5%
field evaluation	2%



**general public**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	18	43.9	43.9	43.9
no	23	56.1	56.1	100.0
Total	41	100.0	100.0	

**Q10G1 general public communication purposes<sup>a</sup>**

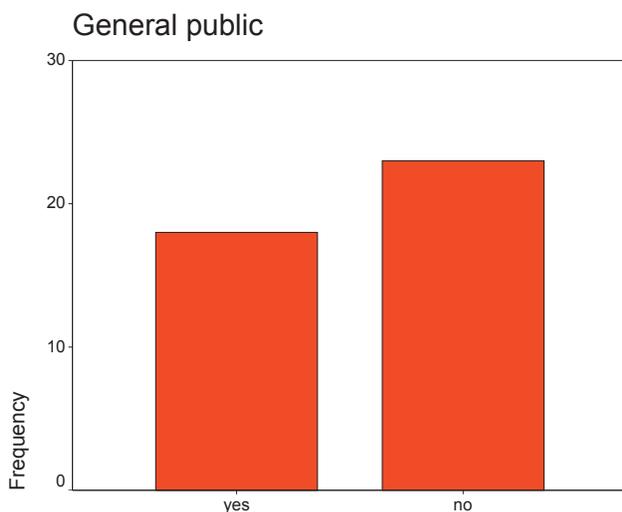
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	24	58.5	58.5	58.5
addressing public inquiry	1	2.4	2.4	61.0
answer inquiries about research	1	2.4	2.4	63.4
answer questions; refer to other units for assistance, as required	1	2.4	2.4	65.9
Handled by our Office of Public Affairs	1	2.4	2.4	68.3
info exchange	1	2.4	2.4	70.7
noise, ride quality issues	1	2.4	2.4	73.2
particular problems	1	2.4	2.4	75.6
planning certain research activities	1	2.4	2.4	78.0
questions concerning status of studies, publications	1	2.4	2.4	80.5
rarely, if ever	1	2.4	2.4	82.9
respond to information requests	1	2.4	2.4	85.4
Respond to requests	1	2.4	2.4	87.8
same as above	1	2.4	2.4	90.2
sharing research successes	1	2.4	2.4	92.7
survey their view of proper customer service by INDOT	1	2.4	2.4	95.1
technology transfer	1	2.4	2.4	97.6
Working to improve through web-Message: Research has solved problem	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a.

Note: Most common purposes:

answer inquiries   15%

info exchange     7%



**Q10H other communication audiences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	11	26.8	26.8	26.8
2 no	30	73.2	73.2	100.0
Total	41	100.0	100.0	

**Q10H1 other audiences please specify -a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30	73.2	73.2	73.2
FHWA	2	4.9	4.9	78.0
FHWA & LTAP	1	2.4	2.4	80.5
Governmental and technical agencies, such as FHWA, AASHTO, TRB, NCHRP, etc	1	2.4	2.4	82.9
legislators	1	2.4	2.4	85.4
local government transportation agencies	1	2.4	2.4	87.8
media	1	2.4	2.4	90.2
other state agencies, FHWA	1	2.4	2.4	92.7
state legislature	1	2.4	2.4	95.1
TRB Library, UCB, NWV	1	2.4	2.4	97.6
TRB, FHWA, FTA, RSPA, NHTSA	1	2.4	2.4	100.0
Total	41	100.0	100.0	

aNote: Most common results tallied:

FHWA	12%
legislators	5%
local gov'n	2%
media	2%

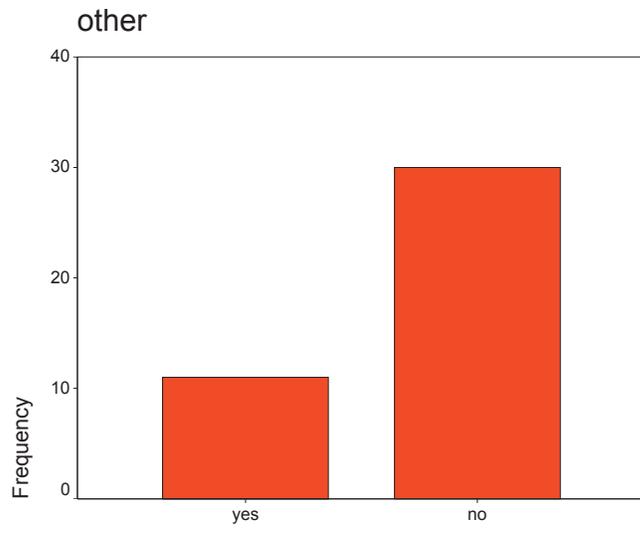
**Q10H2 other audience communication purposes<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	32	78.0	78.0	78.0
addressing political inquiry	1	2.4	2.4	80.5
administer the local roads research program	1	2.4	2.4	82.9
development & conduct of research	1	2.4	2.4	85.4
National research agenda, research management and partnering and projects	1	2.4	2.4	87.8
obtain information	1	2.4	2.4	90.2
program status information	1	2.4	2.4	92.7
research needs identification and serve on technical committees	1	2.4	2.4	95.1
research program oversight	1	2.4	2.4	97.6
solicit research needs and dispense technology transfer material and conduct annual research showcase	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a.

Note: Most common purposes:

research needs	20%
obtain info	5%



**Q11. What conferences or trade shows, if any, do your research office staff regularly attend? (Please list)**

**Q11<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	9.8	9.8	9.8
AASHTO RAC, SHA quality conference, construction expo, regional roadway management conference	1	2.4	2.4	12.2
AASHTO, AASHTO RAC, NASTO RAC, TRB annual mtg.	1	2.4	2.4	14.6
AASHTO, LTAD, TRB, local contractor association meetings	1	2.4	2.4	17.1
AASHTO, transportation research board, ASCE	1	2.4	2.4	19.5
In-state technical conferences, TRB	1	2.4	2.4	22.0
LTAP conference, TRB conference, RAC regional meeting, AASHTO materials committee meeting, WASHTO meeting	1	2.4	2.4	24.4
northwest transportation conference, trb annual meetings	1	2.4	2.4	26.8
NTPEP annual, TRB, RAC	1	2.4	2.4	29.3
Ohio Transportation Engineering Conference, TRB annual meeting	1	2.4	2.4	31.7
research advisory committee meeting, LTA conference	1	2.4	2.4	34.1
transportation and highway engineering conf. AASHTO, TRB. etc	1	2.4	2.4	36.6
Transportation Research Board Annual Meeting	1	2.4	2.4	39.0
transportation research board, FWD user/producer, pavement management, association of asphalt pavement technologists, AASHTO annual meetings	1	2.4	2.4	41.5
Travel restrictions have severely limited attendance at such events	1	2.4	2.4	43.9
TRB	5	12.2	12.2	56.1
TRB annual meeting, AASHTO RAC meeting, SCOR meeting	1	2.4	2.4	58.5
TRB Annual meeting, LTAP Conferences, PA Transportation Safety Conference	1	2.4	2.4	61.0
TRB Annual Meeting, RAC Regional Meeting	1	2.4	2.4	63.4
trb annual meeting, regional/national RAC meeting	1	2.4	2.4	65.9
TRB annual meetings, annual symposium on GIS in transportation	1	2.4	2.4	68.3
TRB annual, summer meetings, Bridge Engineers Seminar, RAC, ITS America, American Public Transportation Conference	1	2.4	2.4	70.7
TRB, AASHTO RAC	1	2.4	2.4	73.2
TRB, AASHTO RAC, PAC NW Roadbuilders, NTPEP	1	2.4	2.4	75.6
TRB, AASHTO, ITS Am, Earthquake	1	2.4	2.4	78.0

Q11<sup>a</sup>

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRB, AASHTO, NTPEP, New England material & research engineers meetings, Northeast state material engineers association meetings, recycled materials resource center conferences	1	2.4	2.4	80.5
	TRB, national and regional RAC conferences, state engineer's meetings, maintenance meetings	1	2.4	2.4	82.9
	TRB, NCHRP, project meetings	1	2.4	2.4	85.4
	TRB, NESMEA	1	2.4	2.4	87.8
	TRB, NJDOT research showcase, LTAP research showcase	1	2.4	2.4	90.2
	TRB, RAC meetings, Asphalt and Paving Conference, Nebraska Concrete Paving Assoc, Association of General Contractors, Project Manager's Conference (NE)	1	2.4	2.4	92.7
	TRB, SEAUPG, FWDUG, RPUG, Southeastern pavement management and design conference, SCAN, AASHTO RAC meetings	1	2.4	2.4	95.1
	TRB, AASHTO, Geotechnical, AAPT, PCI, NCHRP, Pool fund panels, ASTM	1	2.4	2.4	97.6
	TRB, RAC, Tech., Environ.	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

a.

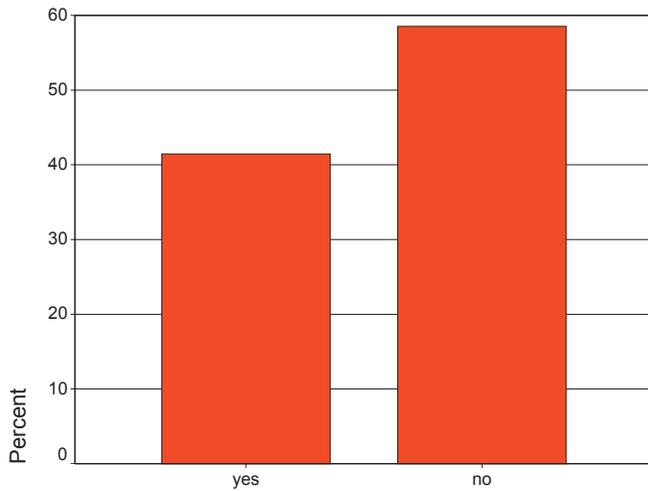
Note: Most common conferences and trade shows that research staff attend:

TRB 56%  
AASHTO 34%  
RAC 32%

## Q12. Do you have research exhibits at conferences?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	17	41.5	41.5	41.5
	no	24	58.5	58.5	100.0
	Total	41	100.0	100.0	

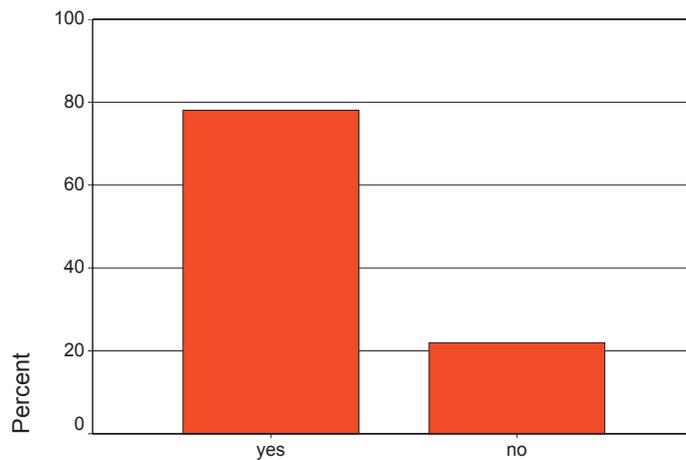
Do you have exhibits at conferences?



**Q13. Does your program's staff give presentations about research projects at conferences or trade shows?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	32	78.0	78.0	78.0
2 no	9	22.0	22.0	100.0
Total	41	100.0	100.0	

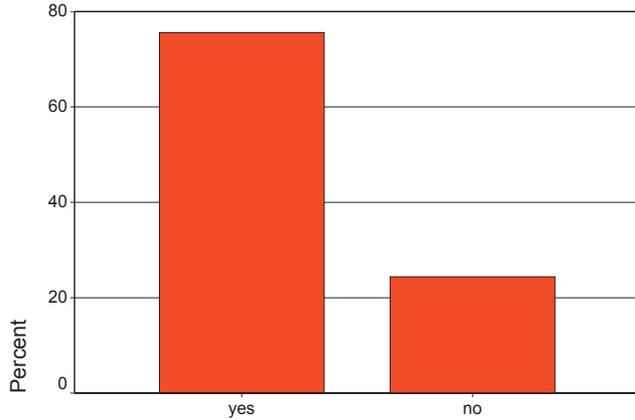
Are your program's research projects presented at conferences or trade shows?



**Q14. Do you ask/require principal investigators to acknowledge your research office in some way in their publications and presentations?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	31	75.6	75.6	75.6
2 no	10	24.4	24.4	100.0
Total	41	100.0	100.0	

Do you ask/require principal investigators to acknowledge your office?



**Q15A Promotional communication tools to reach contractors: office and /or DOT newsletters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	yes	19	46.3	46.3
Valid 2	no	22	53.7	100.0
Total		41	100.0	

**Q15A1 Is it provided in hard-copy, electronically, or both?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	hard copy	5	12.2	12.2
Valid 2	electronically	25	61.0	73.2
Valid 3	both	11	26.8	100.0
Total		41	100.0	

**Q15A2 How often is it published?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid		22	53.7	53.7
annually	1	2.4	2.4	56.1
intermit.	1	2.4	2.4	58.5
monthly	2	4.9	4.9	63.4
periodical	1	2.4	2.4	65.9
quarterly	11	26.8	26.8	92.7
semi-ann	3	7.3	7.3	100.0
Total	41	100.0	100.0	

**Q15A3 How many pages?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	46.3	46.3	46.3
.	3	7.3	7.3	53.7
1:1-8	15	36.6	36.6	90.2
2:9-16	2	4.9	4.9	95.1
3:>16	2	4.9	4.9	100.0
Total	41	100.0	100.0	

**Q15B News releases**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q15C brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	22.0	22.0	22.0
2 no	32	78.0	78.0	100.0
Total	41	100.0	100.0	

**Q15D tech briefs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	13	31.7	31.7	31.7
2 no	28	68.3	68.3	100.0
Total	41	100.0	100.0	

**Q15E feature articles**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	11	26.8	26.8	26.8
2 no	30	73.2	73.2	100.0
Total	41	100.0	100.0	

**Q15F research office web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	21	51.2	51.2	51.2
2 no	20	48.8	48.8	100.0
Total	41	100.0	100.0	

**Q15F1 Does it include an email link?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	15	36.6	36.6	36.6
2 no	26	63.4	63.4	100.0
Total	41	100.0	100.0	

**Q15G chat room or electronic bulletin board**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	2.4	2.4	2.4
	2 no	40	97.6	97.6	100.0
	Total	41	100.0	100.0	

**Q15H listserv/electronic mail list**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	2.4	2.4	2.4
	2 no	40	97.6	97.6	100.0
	Total	41	100.0	100.0	

**Q15I letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	10	24.4	24.4	24.4
	2 no	31	75.6	75.6	100.0
	Total	41	100.0	100.0	

**Q15J speeches/presentation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	16	39.0	39.0	39.0
	2 no	25	61.0	61.0	100.0
	Total	41	100.0	100.0	

**Q15K telephone**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	16	39.0	39.0	39.0
	2 no	25	61.0	61.0	100.0
	Total	41	100.0	100.0	

**Q15L personal email**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	17	41.5	41.5	41.5
	2 no	24	58.5	58.5	100.0
	Total	41	100.0	100.0	

**Q15M office visits**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	11	26.8	26.8	26.8
	2 no	30	73.2	73.2	100.0
	Total	41	100.0	100.0	

**Q15N conferences/meeting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	24	58.5	58.5	58.5
2 no	17	41.5	41.5	100.0
Total	41	100.0	100.0	

**Q15O training sessions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	13	31.7	31.7	31.7
2 no	28	68.3	68.3	100.0
Total	41	100.0	100.0	

**Q15R annual reports**

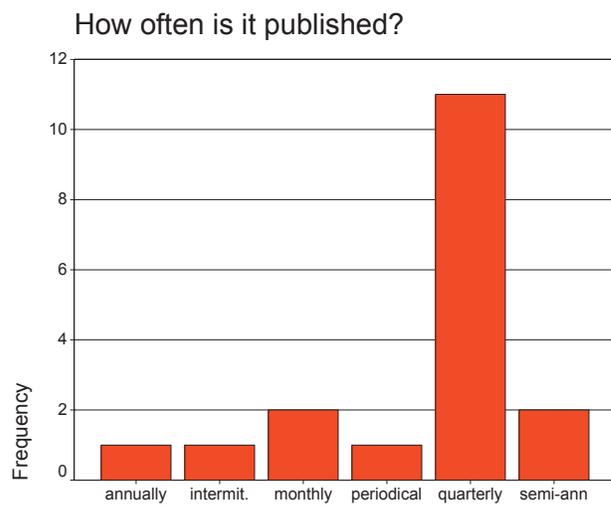
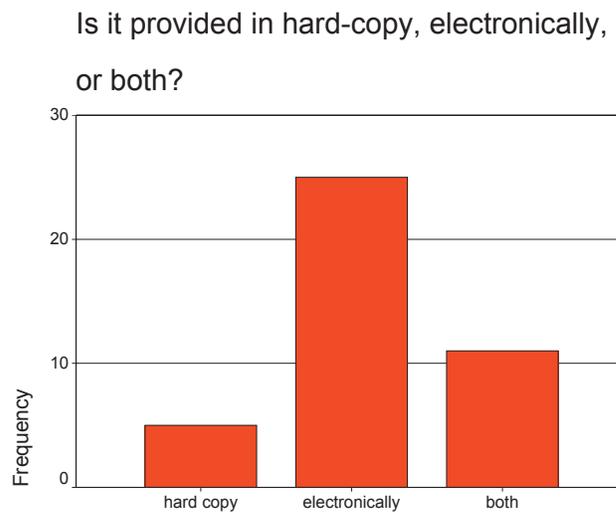
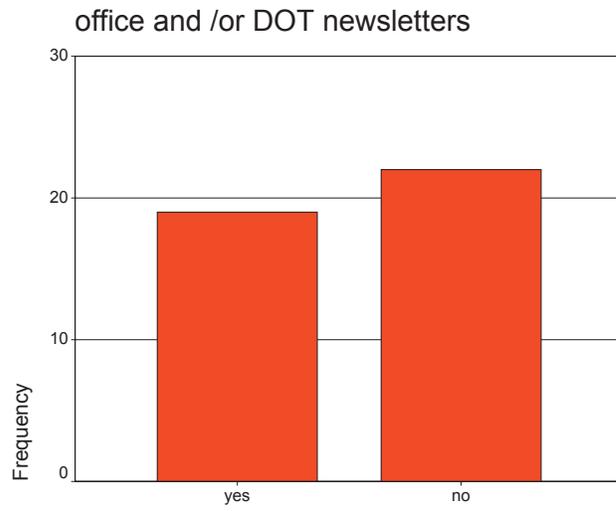
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	14	34.1	35.0	35.0
2 no	26	63.4	65.0	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

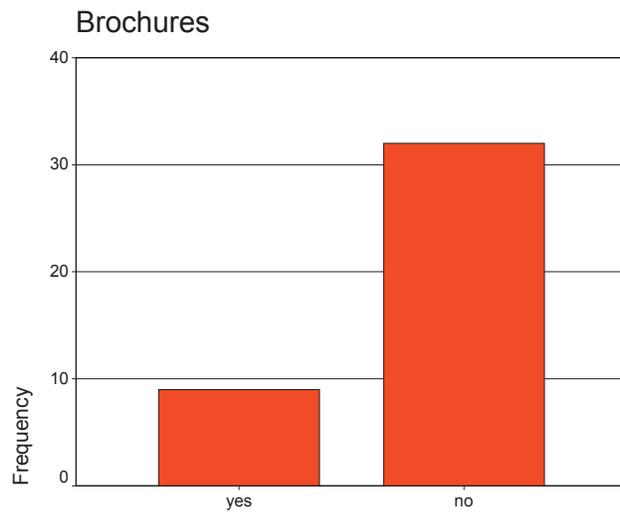
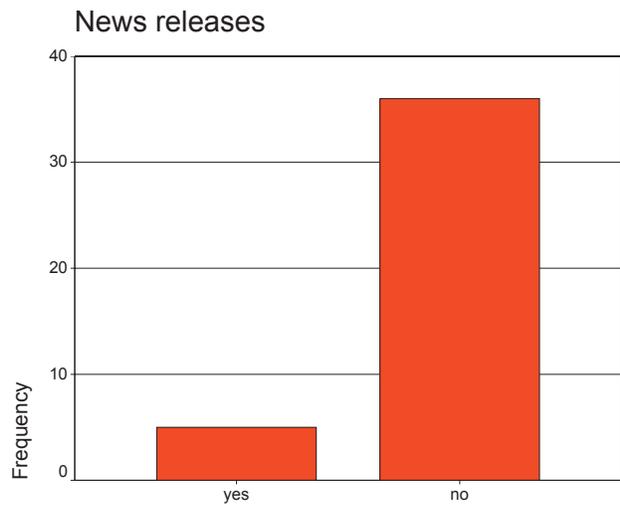
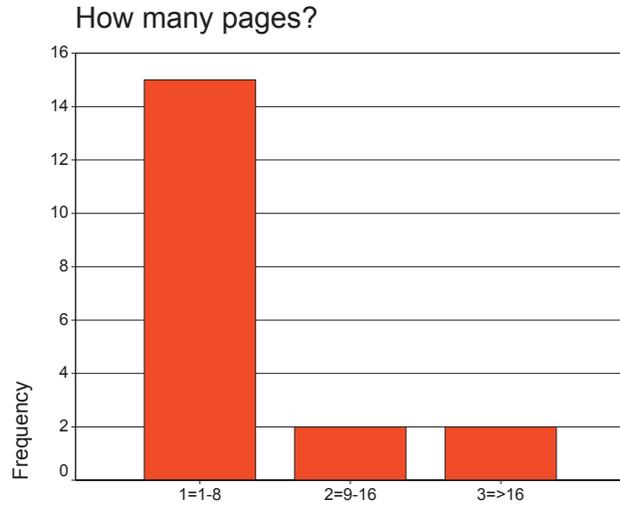
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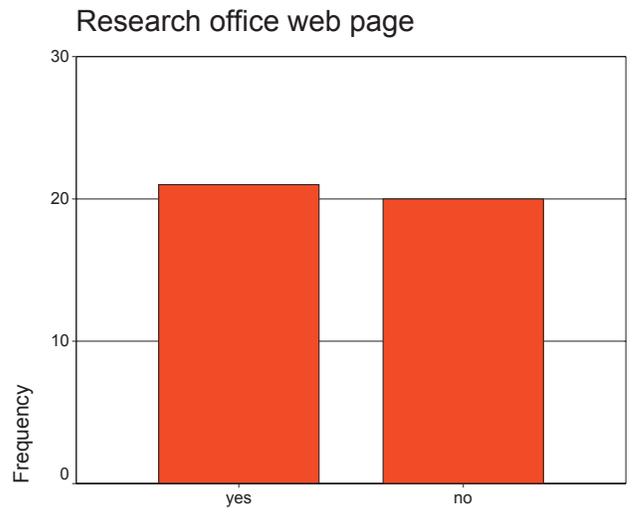
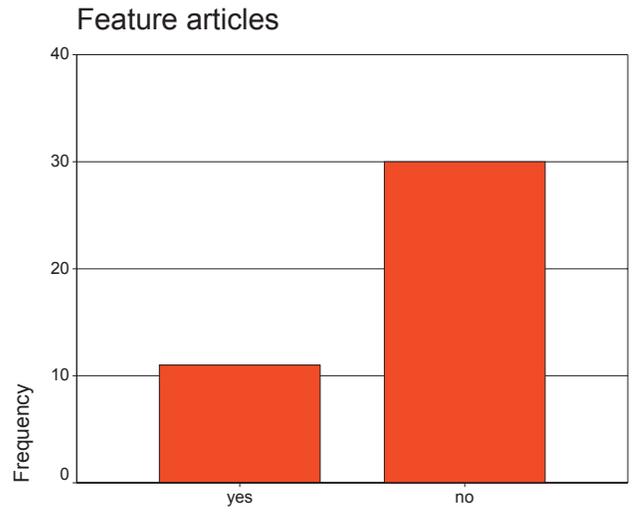
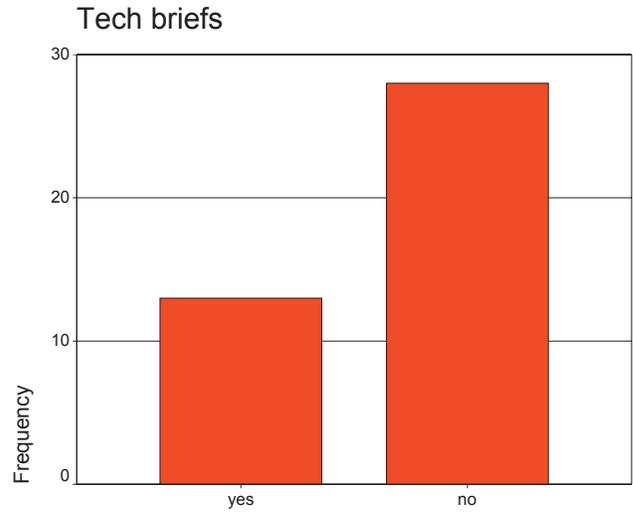
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	7.3	7.3	7.3
2 no	38	92.7	92.7	100.0
Total	41	100.0	100.0	

**Q15P1 specify**

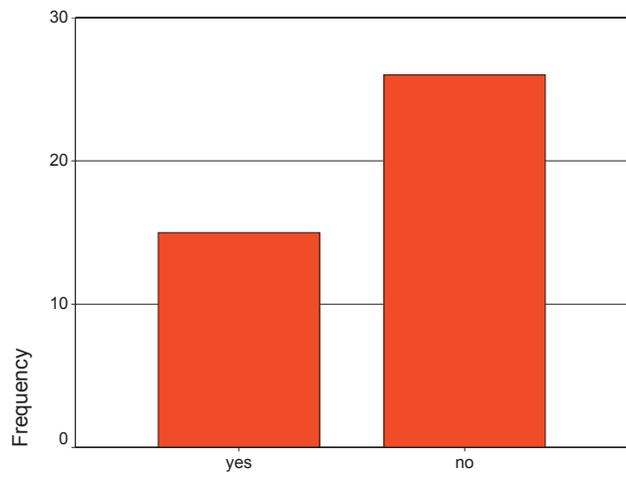
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38	92.7	92.7	92.7
personal visits, include on project technical panels, invit research suggestions	1	2.4	2.4	95.1
project summaries	1	2.4	2.4	97.6
videos, CDs	1	2.4	2.4	100.0
Total	41	100.0	100.0	



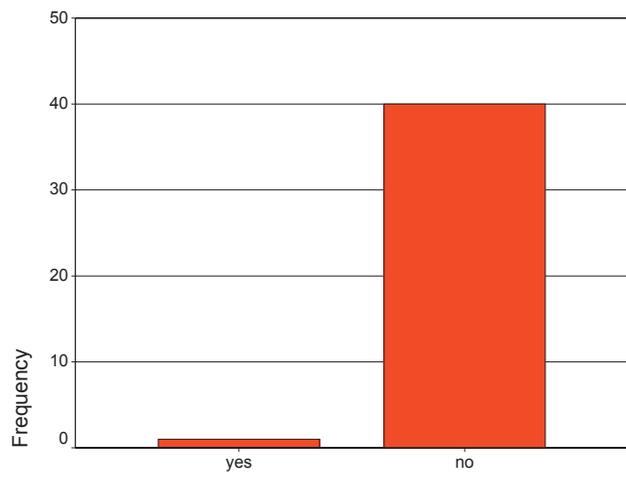




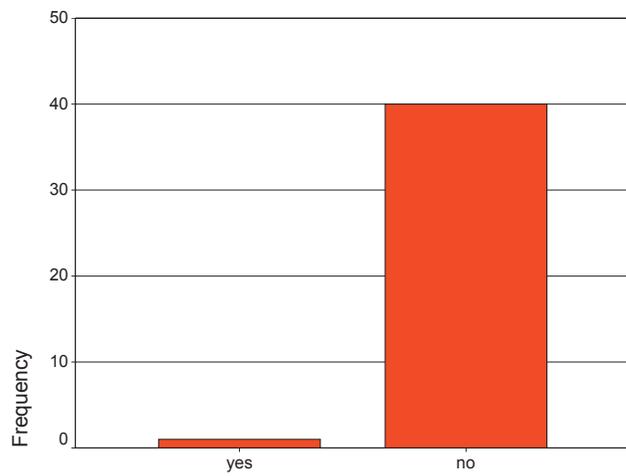
Does it include an email link?

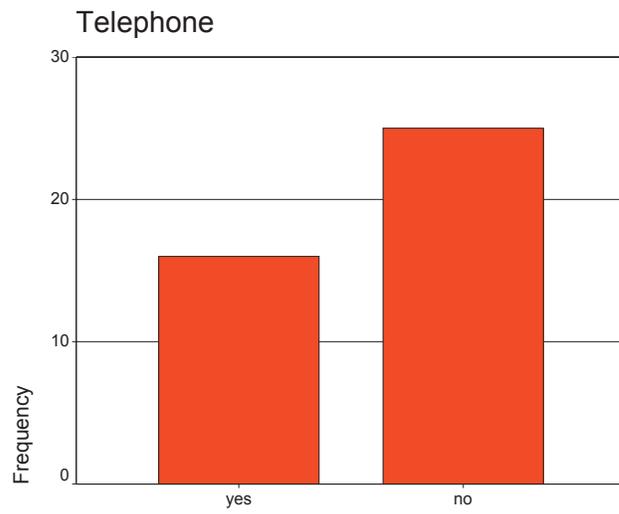
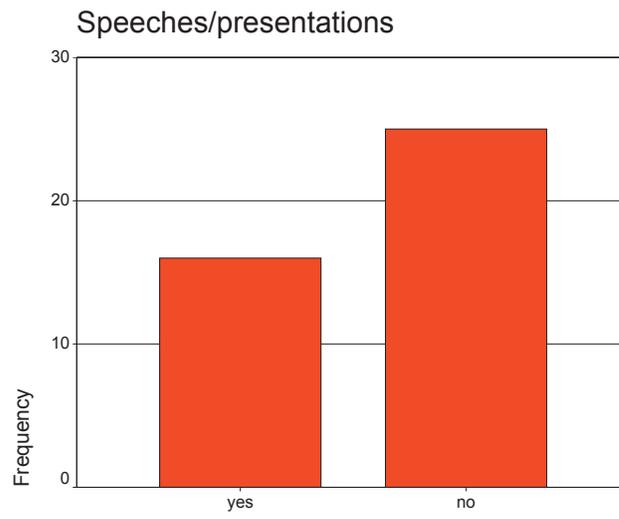
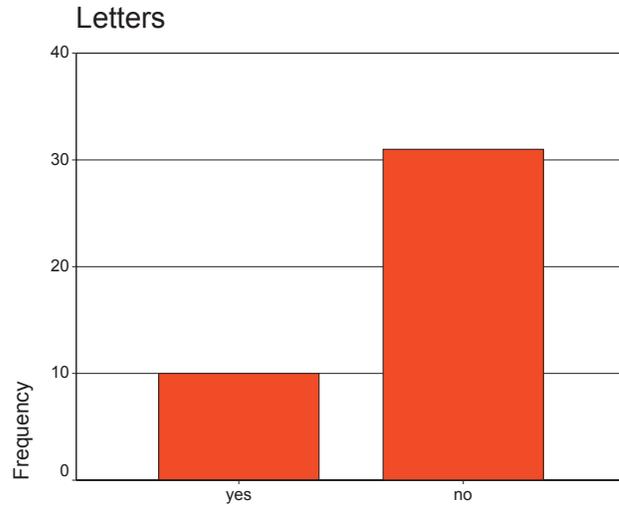


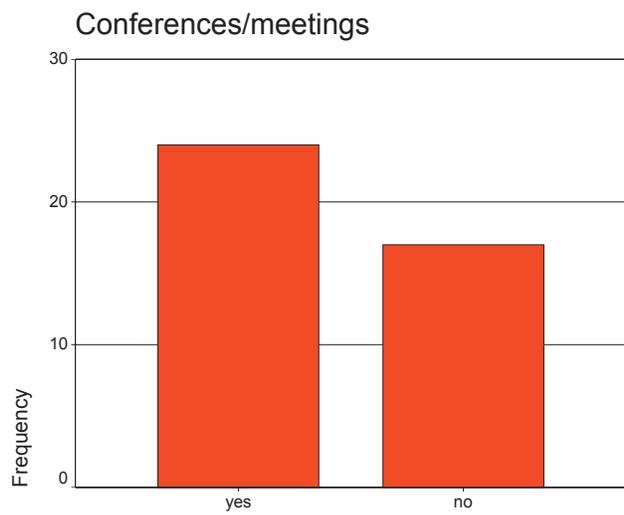
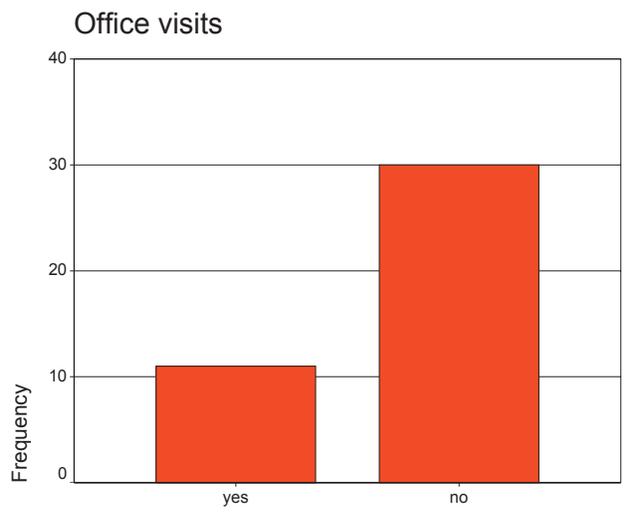
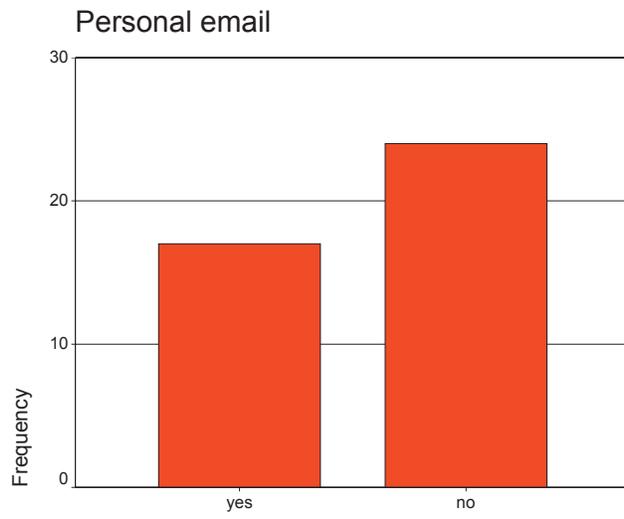
Chat room or electronic bulletin board

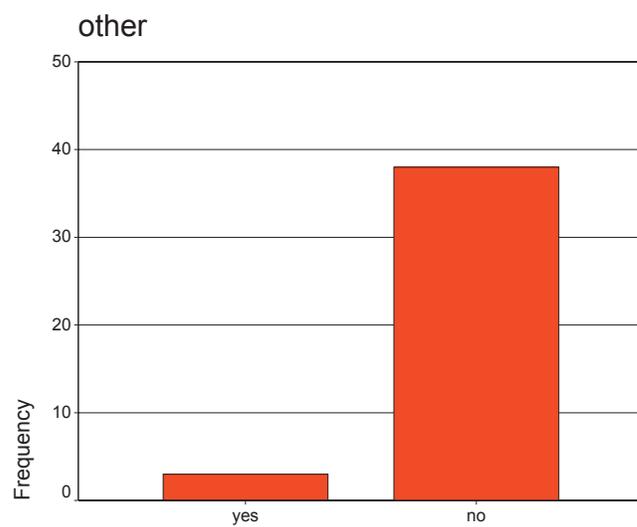
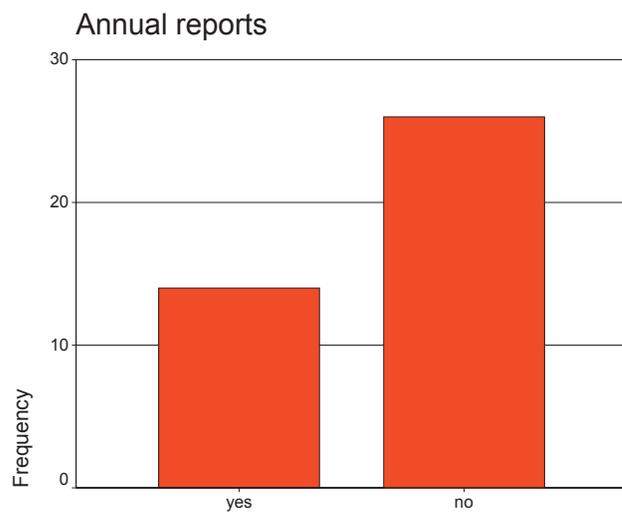
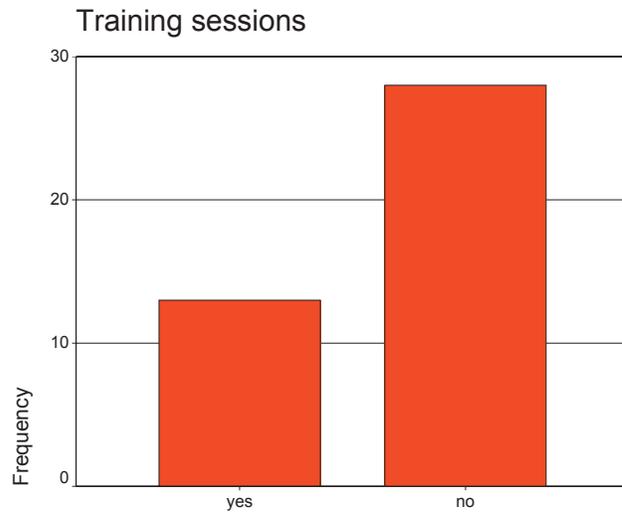


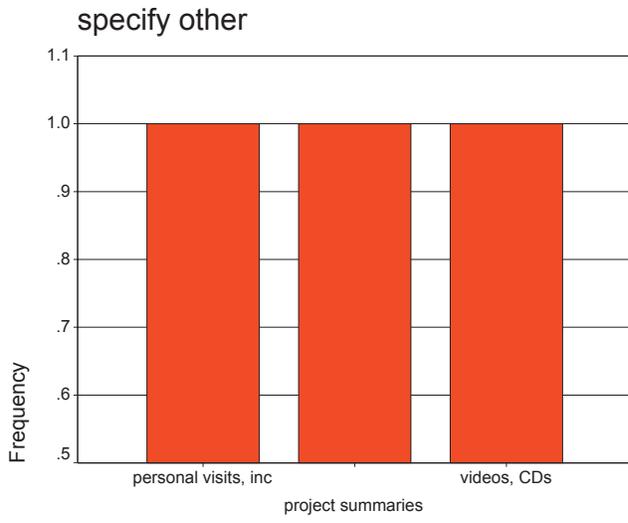
Listserv/electronic mail list











**Q16: Which of these promotional methods do you believe are most effective for reaching construction contractors? (These may or may not be the same methods you are currently using.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	24.4	24.4	24.4
all	1	2.4	2.4	26.8
Conferences	1	2.4	2.4	29.3
Conferences/meetings	1	2.4	2.4	31.7
conferencews, training sessions	1	2.4	2.4	34.1
Feature articles in other publications	1	2.4	2.4	36.6
Generally, it is not necessary to reach construction contractors through promotional methods. Conferences effective on construction quality assurance.	1	2.4	2.4	39.0
Meetings and tech briefs	1	2.4	2.4	41.5
n/a	1	2.4	2.4	43.9
News releases and contractor newsletters. Meetings with trade associations.	1	2.4	2.4	46.3
office visits	1	2.4	2.4	48.8
Office visits and personal contact are best	1	2.4	2.4	51.2
Our material division which is not a part of research coordinates the department's interaction with construction contractors in regards to research	1	2.4	2.4	53.7
personal contact, AGC meetings and conferences	1	2.4	2.4	56.1
Presentation	1	2.4	2.4	58.5
Presentations at construction conferences, articles in trade journals and direct mail	1	2.4	2.4	61.0
Professional and trade organizational meetings	1	2.4	2.4	63.4
regularly meeting with trade association	1	2.4	2.4	65.9
Research office web page, newsletter, article in publication, conferences, training	1	2.4	2.4	68.3
Speeches and presentations at conferences	1	2.4	2.4	70.7
Tech briefs, Internet Web pages, annual report	1	2.4	2.4	73.2
technology transfer newsletter, training sessions	1	2.4	2.4	75.6
telephone, email, training	1	2.4	2.4	78.0
training sessions, web page	1	2.4	2.4	80.5
visits, phone	1	2.4	2.4	82.9
We do not focus on construction contractors	1	2.4	2.4	85.4
We do not target contractors specifically	1	2.4	2.4	87.8
We don't normally do this. Operating divisions and districts do this.	1	2.4	2.4	90.2
web page, technical summaries	1	2.4	2.4	92.7
website	1	2.4	2.4	95.1
website, conferences, presentations, newsletter	1	2.4	2.4	97.6
website, newsletter	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q17: Which of the following promotional communication tools do you employ to reach university researchers:****Q17A office and /or DOT newsletters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	23	56.1	56.1	56.1
2 no	18	43.9	43.9	100.0
Total	41	100.0	100.0	

**Q17A1 Is it provided in hard-copy, electronically, or both?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 hard copy	5	12.2	12.2	12.2
2 electronically	22	53.7	53.7	65.9
3 both	14	34.1	34.1	100.0
Total	41	100.0	100.0	

**Q17A2 How often is it published?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	46.3	46.3	46.3
2-3 times/yr	1	2.4	2.4	48.8
annually	2	4.9	4.9	53.7
intermitt	1	2.4	2.4	56.1
monthly	2	4.9	4.9	61.0
periodically	1	2.4	2.4	63.4
quarterly	13	31.7	31.7	95.1
semi-annually	2	4.9	4.9	100.0
Total	41	100.0	100.0	

**Q17A3 How many pages?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17	41.5	41.5	41.5
no response	1	2.4	2.4	43.9
1-8	16	39.0	39.0	82.9
8-16	6	14.6	14.6	97.6
front and back	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q17B News release**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q17C brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q17D tech briefs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	12	29.3	29.3	29.3
	2 no	29	70.7	70.7	100.0
	Total	41	100.0	100.0	

**Q17E Transportation research information services**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	30	73.2	73.2	73.2
	2 no	11	26.8	26.8	100.0
	Total	41	100.0	100.0	

**Q17F research in progress database**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	29	70.7	70.7	70.7
	2 no	12	29.3	29.3	100.0
	Total	41	100.0	100.0	

**Q17G feature articles**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	12	29.3	29.3	29.3
	2 no	29	70.7	70.7	100.0
	Total	41	100.0	100.0	

**Q17H research office web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	26	63.4	63.4	63.4
	2 no	15	36.6	36.6	100.0
	Total	41	100.0	100.0	

**Q17H1 Does it include an email link**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	17	41.5	41.5	41.5
	2 no	24	58.5	58.5	100.0
	Total	41	100.0	100.0	

**Q17I chat room or electronic bulletin board**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	41	100.0	100.0	100.0

**Q17J listserv/electronic mail list**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	22.0	22.0	22.0
2 no	32	78.0	78.0	100.0
Total	41	100.0	100.0	

**Q17K letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	16	39.0	39.0	39.0
2 no	25	61.0	61.0	100.0
Total	41	100.0	100.0	

**Q17L speeches/presentation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	20	48.8	48.8	48.8
2 no	21	51.2	51.2	100.0
Total	41	100.0	100.0	

**Q17M telephone**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	30	73.2	73.2	73.2
2 no	11	26.8	26.8	100.0
Total	41	100.0	100.0	

**Q17N personal email**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	35	85.4	85.4	85.4
2 no	6	14.6	14.6	100.0
Total	41	100.0	100.0	

**Q17O office visits**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	27	65.9	65.9	65.9
2 no	14	34.1	34.1	100.0
Total	41	100.0	100.0	

**Q17P conferences/meetings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	34	82.9	82.9	82.9
2 no	7	17.1	17.1	100.0
Total	41	100.0	100.0	

**Q17Q training sessions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	10	24.4	24.4	24.4
2 no	31	75.6	75.6	100.0
Total	41	100.0	100.0	

**Q17R other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q17R1 specify**

	Frequency	Percent
Valid	36	87.8
Annual Research Solicitation, Annual Meeting and TRB Journals	1	2.4
personal visits, include on project technical panels, invite research suggestions	1	2.4
quarterly meeting	1	2.4
showcases on specific projects, posters	1	2.4
videos, CDs	1	2.4
Total	41	100.0

**Q17R1 specify**

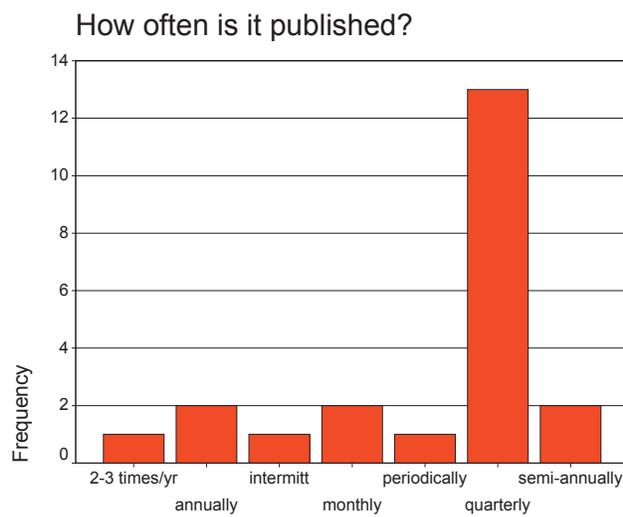
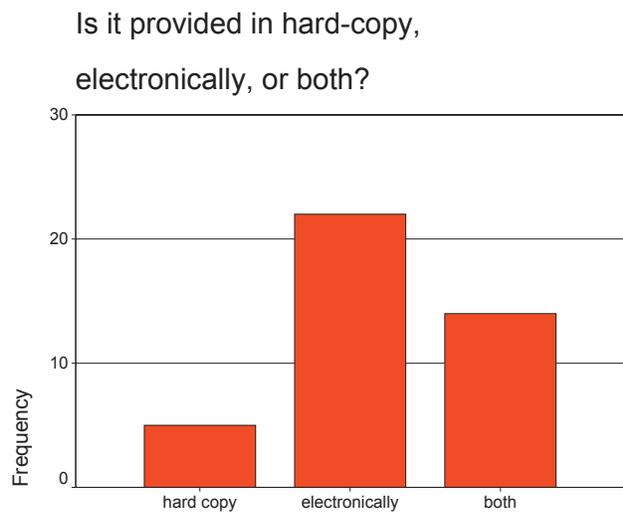
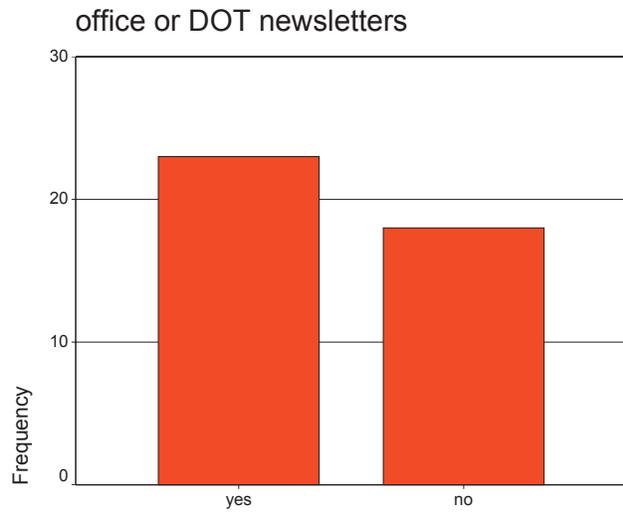
	Valid Percent	Cumulative Percent
Valid	87.8	87.8
Annual Research Solicitation, Annual Meeting and TRB Journals	2.4	90.2
personal visits, include on project technical panels, invite research suggestions	2.4	92.7
quarterly meeting	2.4	95.1
showcases on specific projects, posters	2.4	97.6
videos, CDs	2.4	100.0
Total	100.0	

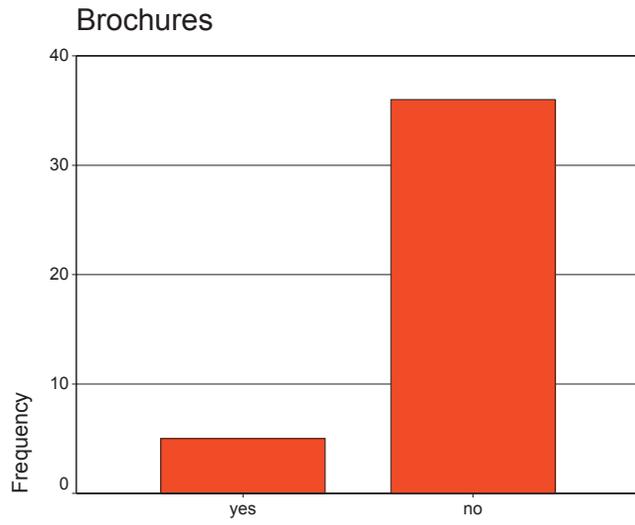
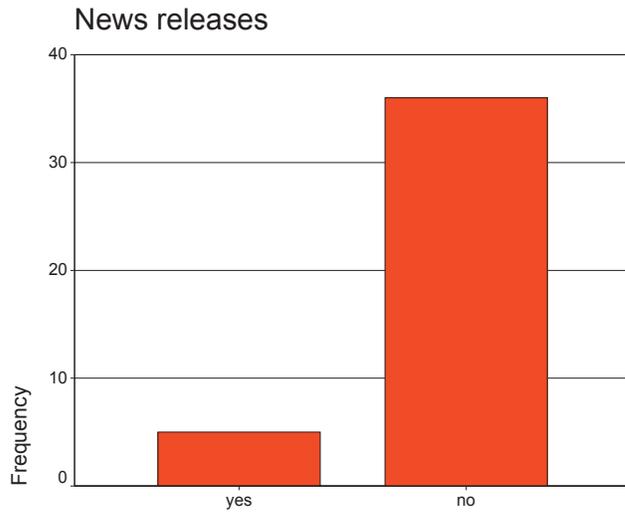
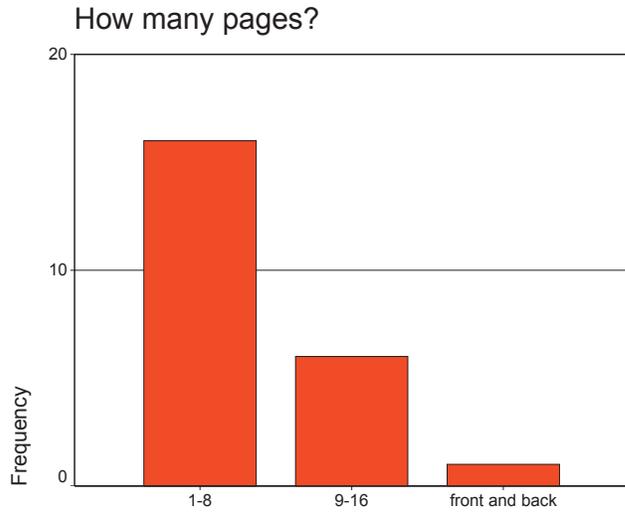
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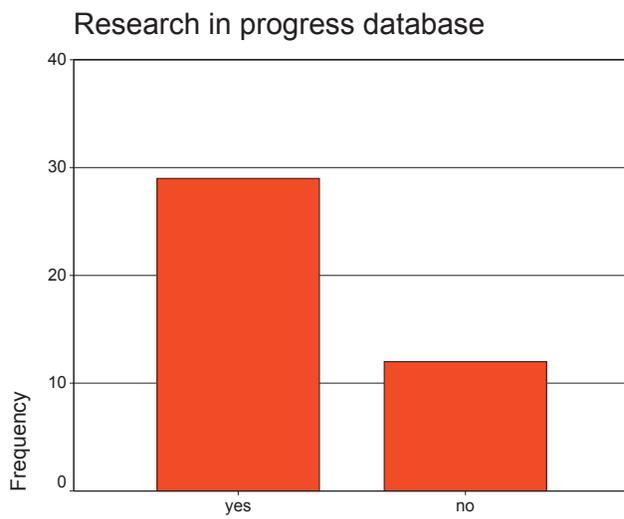
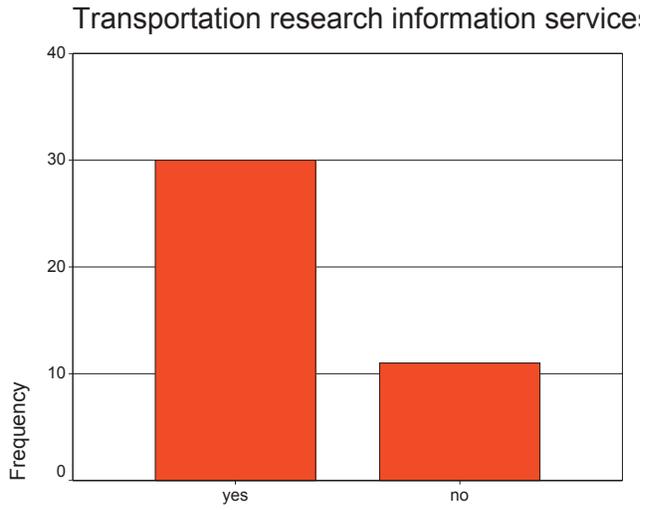
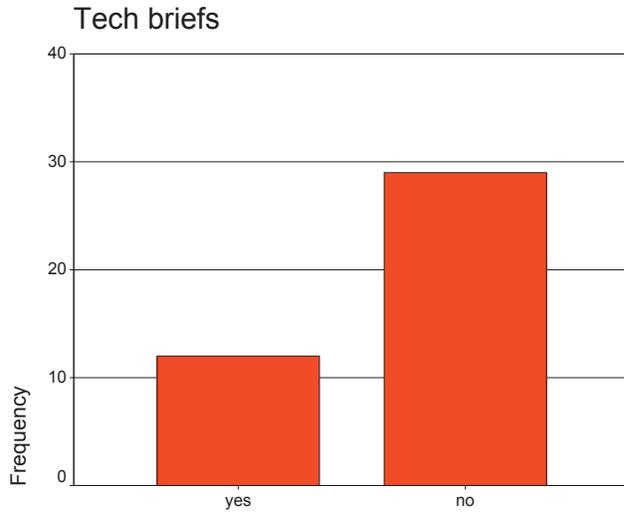
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	2.4	2.4	2.4
2 no	40	97.6	97.6	100.0
Total	41	100.0	100.0	

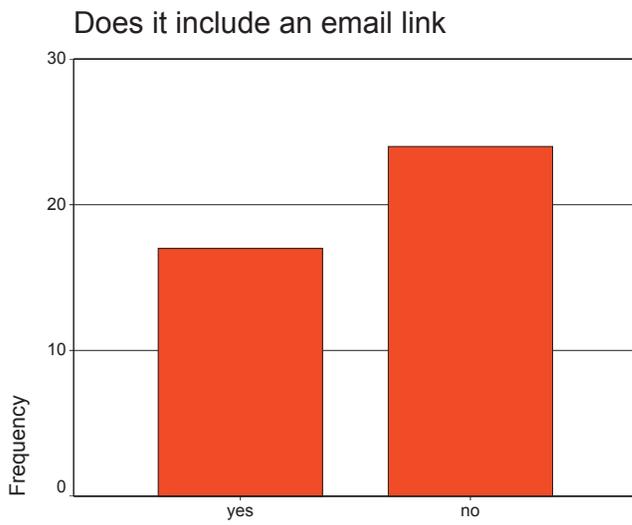
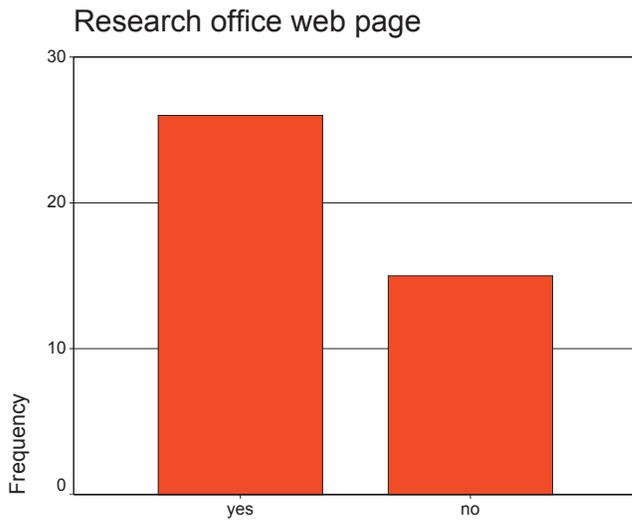
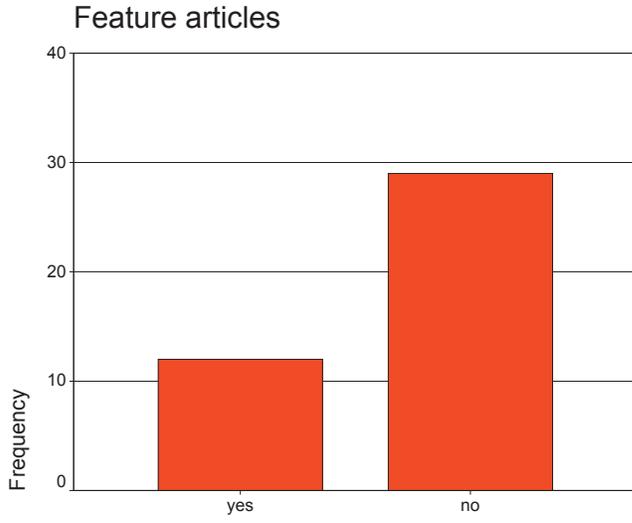
**Q17T annual reports**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	18	43.9	43.9	43.9
2 no	23	56.1	56.1	100.0
Total	41	100.0	100.0	

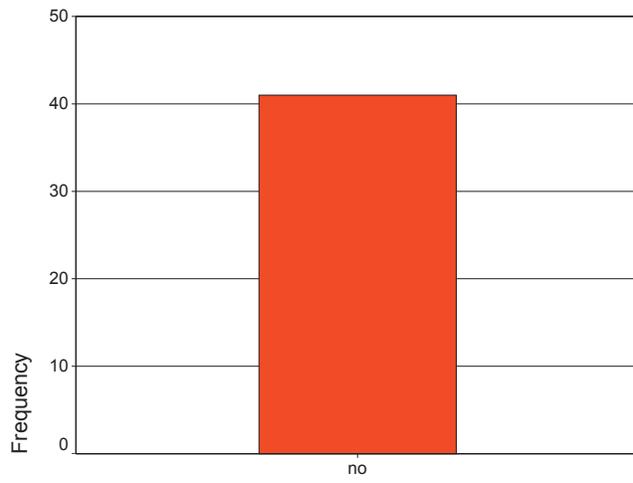




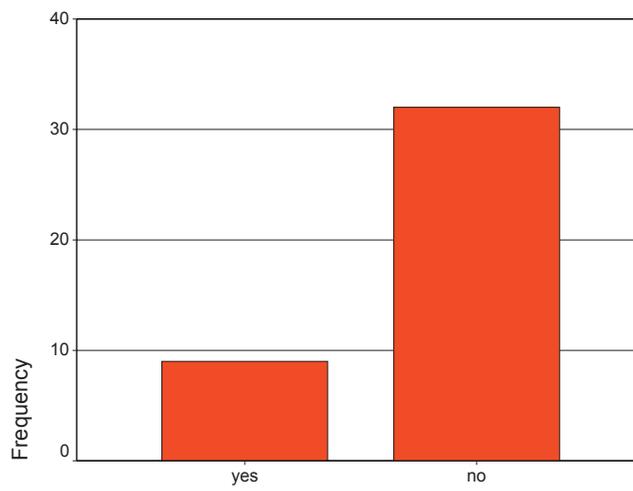




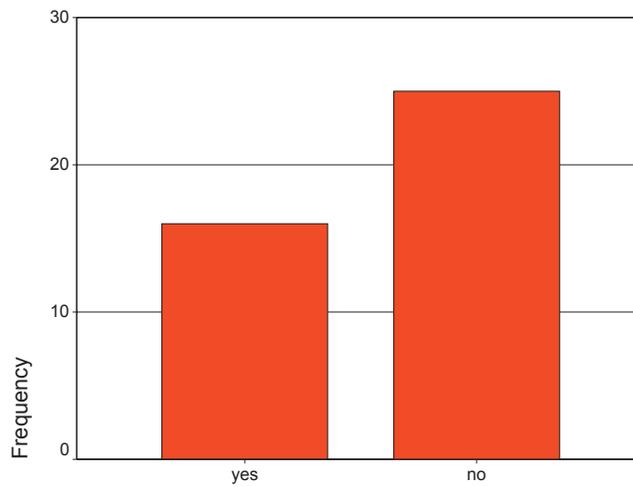
Chat room or electronic bulletin board

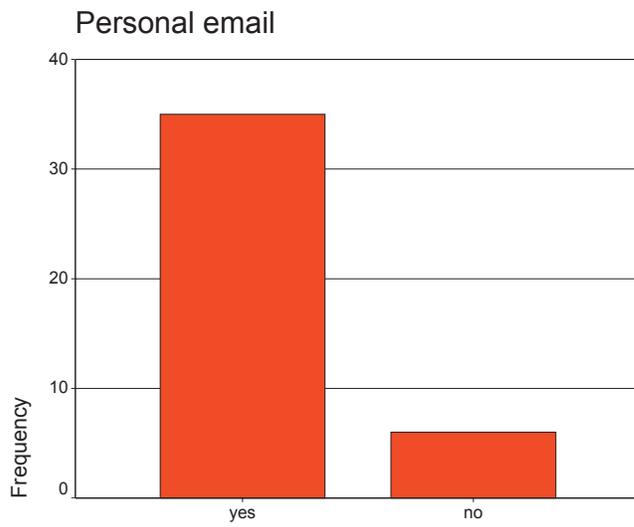
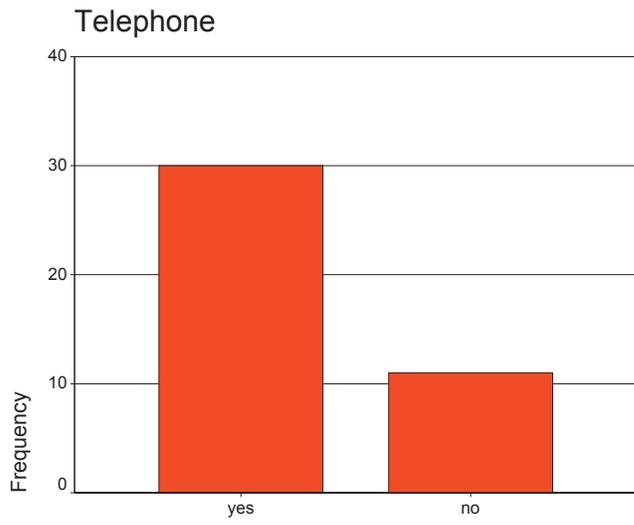
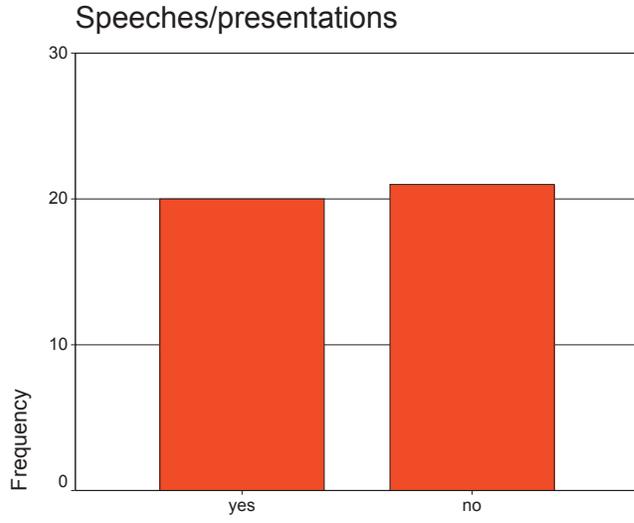


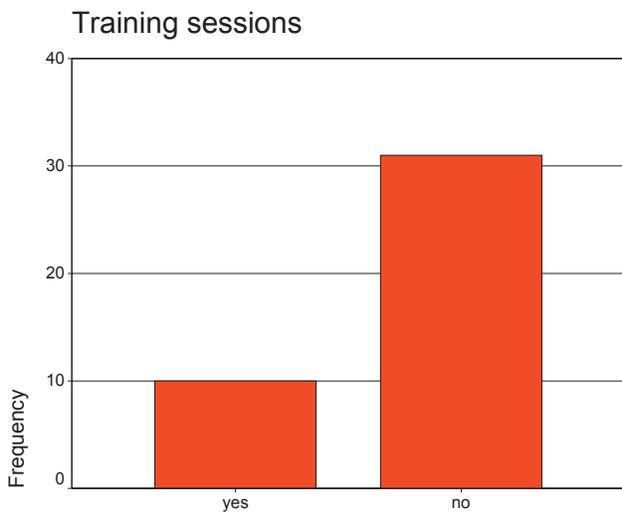
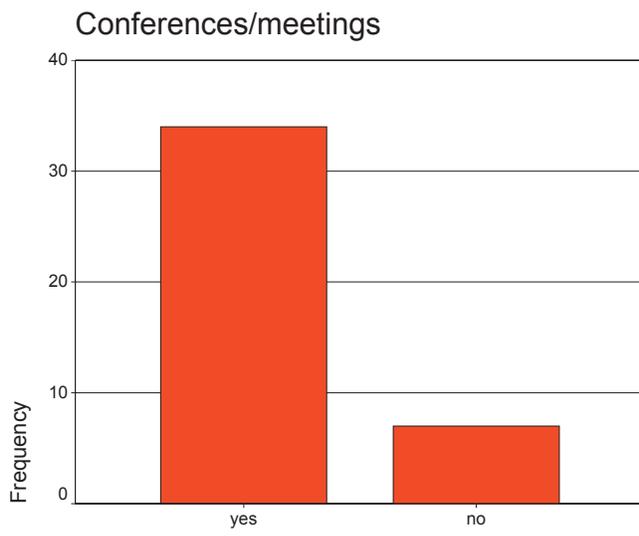
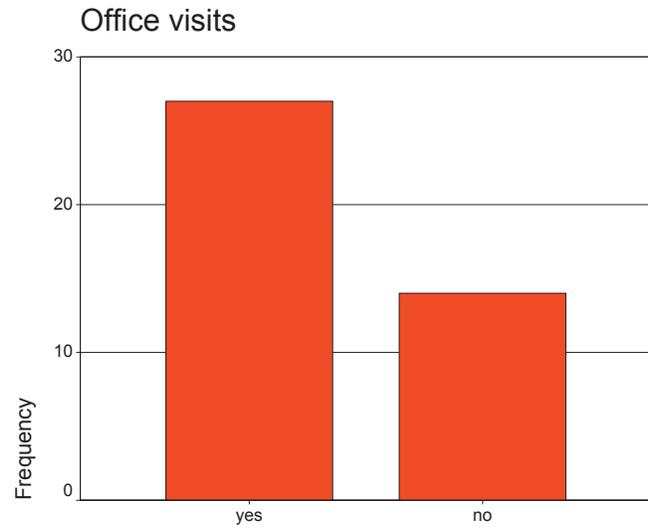
Listserv/electronic mail list

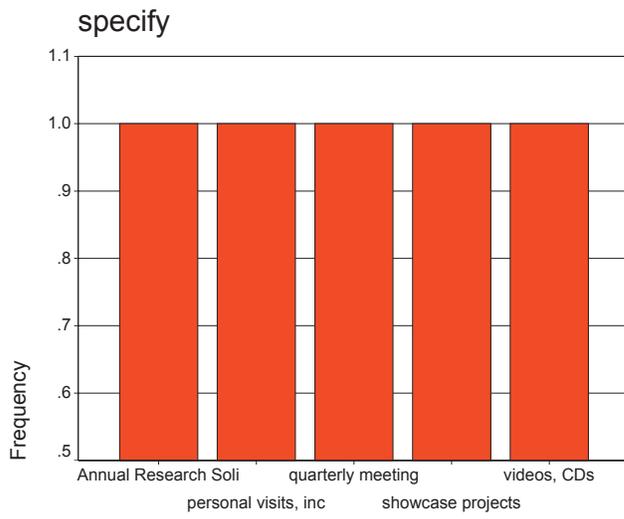
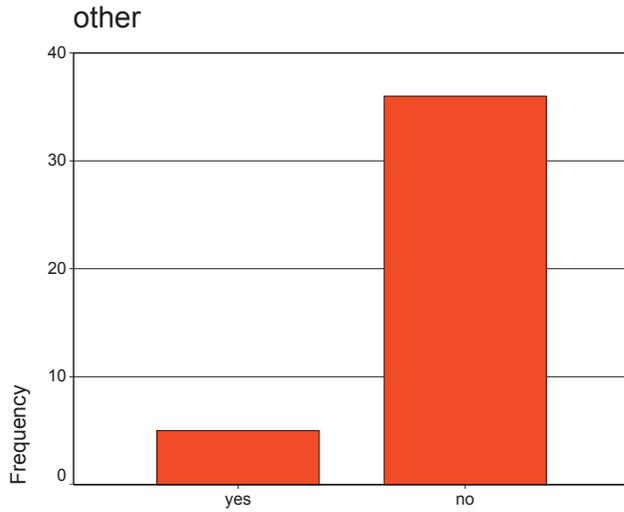
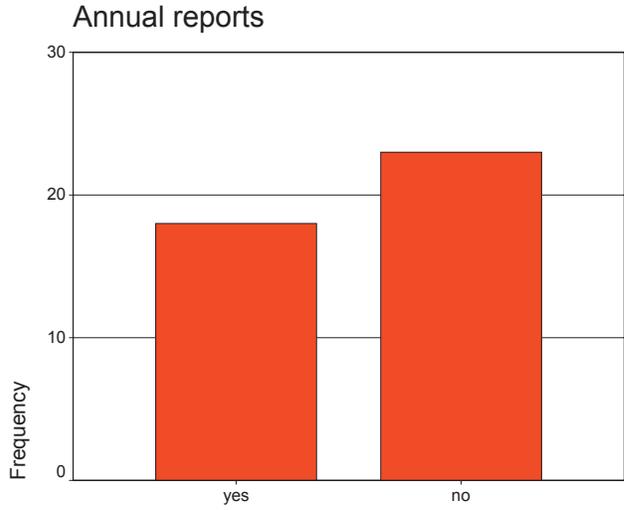


Letters









**Q18: Which promotional methods do you believe are most effective for reaching university researchers? (These may or may not be the same methods you are currently using.)a**

**Frequencies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	12.2	12.2	12.2
all	1	2.4	2.4	14.6
Annual research solicitation, meetings, personal email and telephone	1	2.4	2.4	17.1
conferences, tris, web page	1	2.4	2.4	19.5
Conferences, website	1	2.4	2.4	22.0
conferences/meetings	1	2.4	2.4	24.4
Conferences/meetings	1	2.4	2.4	26.8
Each method is required depending on the circumstances	1	2.4	2.4	29.3
Email and meetings	1	2.4	2.4	31.7
email, Web	1	2.4	2.4	34.1
Face-to-face	1	2.4	2.4	36.6
frequent meetings and visits	1	2.4	2.4	39.0
meetings, conferences, website	1	2.4	2.4	41.5
Michigan Transportation Research Consortium, meetings, emails, office visits, biennial reearch summit	1	2.4	2.4	43.9
Newsletters, RIP, TRIS	1	2.4	2.4	46.3
Office visits	1	2.4	2.4	48.8
office visits and personal contact are best	1	2.4	2.4	51.2
personal communication and meetings	1	2.4	2.4	53.7
personal contact including tel, email, office visits and conference/meeting	1	2.4	2.4	56.1
Personal contact, website, solicitation for problem statements, participation in department RAC process	1	2.4	2.4	58.5
personal email, phone conversations, tech briefs, presentations, visits	1	2.4	2.4	61.0
phone, e-mail and website-depends upon the number of researchers we need to contact for a particular purpose	1	2.4	2.4	63.4
phone, email	1	2.4	2.4	65.9
presentations and website	1	2.4	2.4	68.3
Research office web page, conference/meetings, personal e-mail	1	2.4	2.4	70.7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Same	1	2.4	2.4	73.2
	Some form of idrect contact, telephone or e-mail, etc	1	2.4	2.4	75.6
	Tech priefs, Internet Web Pages, annual report	1	2.4	2.4	78.0
	Telephone, personal e-mail	1	2.4	2.4	80.5
	To coordinate the universities involvement in our program the most effective means is via personal contact	1	2.4	2.4	82.9
	training sessions	1	2.4	2.4	85.4
	training sessions, web pages	1	2.4	2.4	87.8
	TRIS, RIP, tech briefs, e-mails/mtgs/call	1	2.4	2.4	90.2
	We have currently developed a Collaboration Agreement with our three state universities which we think will promote research in the state and increase contact with researchers	1	2.4	2.4	92.7
	web page, personal email, conference/meetings	1	2.4	2.4	95.1
	Webpage	1	2.4	2.4	97.6
	website, showcases, posters	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

Note: Most common methods to reach university researchers:

webpages	27%
meetings	29%
emails	27%
office visits	7%

**Q19: Which of the following promotional communication tools do you employ to reach other DOT research offices?**

**Q19A office and /or DOT newsletters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	21	51.2	51.2	51.2
2 no	20	48.8	48.8	100.0
Total	41	100.0	100.0	

**Q19A1 Is it provided in hard-copy, electronically, or both?**

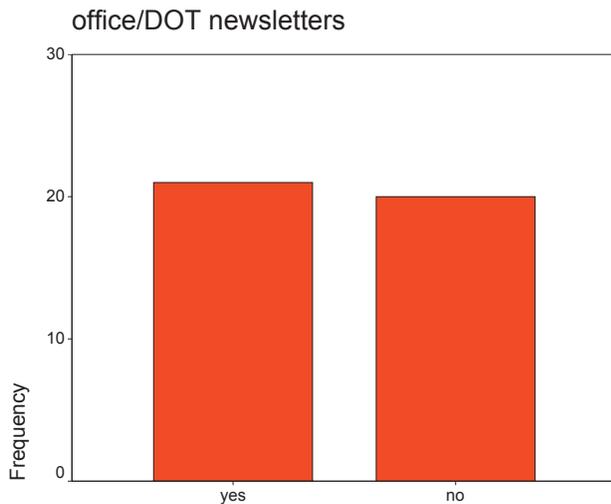
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 hard copy	1	2.4	2.5	2.5
2 electronically	25	61.0	62.5	65.0
3 both	14	34.1	35.0	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

**Q19A2 How often is it published?**

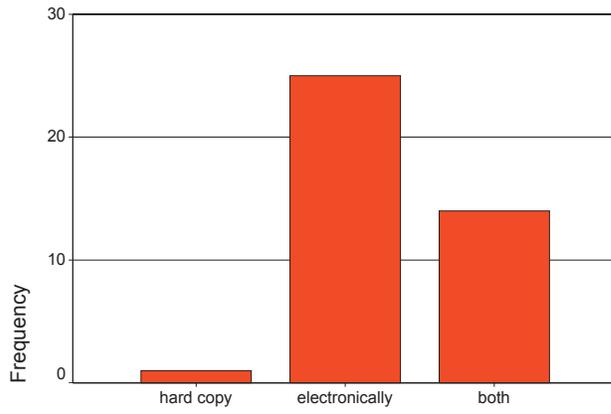
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid quarterly	24	58.5	58.5	58.5
two times a year	14	34.1	34.1	92.7
Total	3	7.3	7.3	100.0
Total	41	100.0	100.0	

**Q19R none**

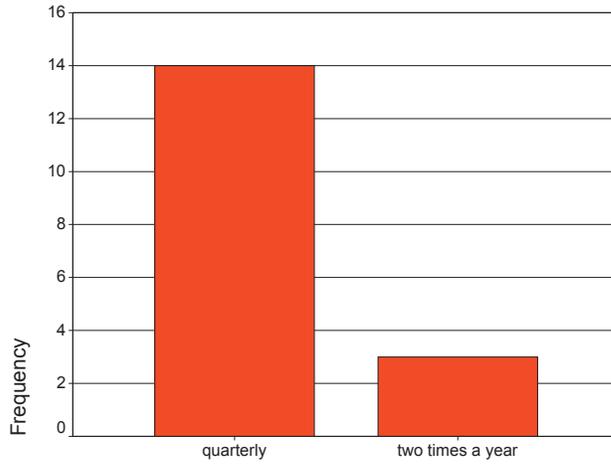
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	41	100.0	100.0	100.0



Is it provided in hard-copy, electronically, or both?



How often is it published?



**Q20: Which promotional methods do you believe are most effective for reaching other DOT research offices?  
(These may or may not be the same methods you are currently using.)a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	7.3	7.3	7.3
AASHTO RAC meetings, New England Materials and Research Engineers annual meeting	1	2.4	2.4	9.8
all	1	2.4	2.4	12.2
annual reports, newsletter	1	2.4	2.4	14.6
combination of email and research web site	1	2.4	2.4	17.1
conference, TRIS, RIP, emails, phone	1	2.4	2.4	19.5
Conferences, meetings, phone, email	1	2.4	2.4	22.0
conferences/meetings	1	2.4	2.4	24.4
Each method is required depending on the circumstances	1	2.4	2.4	26.8
Electronic means likely best due to dispersal of entities	1	2.4	2.4	29.3
email, website	1	2.4	2.4	31.7
emails about projects, RAC listserv	1	2.4	2.4	34.1
emails and meetings	1	2.4	2.4	36.6
Listserv, personal email, conference	1	2.4	2.4	39.0
listserv/electronic mail list and RAC meetings	1	2.4	2.4	41.5
newsletter, webpage	1	2.4	2.4	43.9
newsletters	1	2.4	2.4	46.3
Newsletters, TRIS, Listserv	1	2.4	2.4	48.8
Personal contact and RIP/TRIS	1	2.4	2.4	51.2
personal contact, webpage in future, tech brief	1	2.4	2.4	53.7
personal e-mails, research office web page	1	2.4	2.4	56.1
Personal networking	1	2.4	2.4	58.5
phone, email, conferences, meetings, TRIS, RIP, listserv	1	2.4	2.4	61.0
project abstract with electronic link to report	1	2.4	2.4	63.4
RAC listserv, email	1	2.4	2.4	65.9
RAC listserv, Tech briefs, Internet Web pages, annual report	1	2.4	2.4	68.3
research office web page, conferences/meetings	1	2.4	2.4	70.7
Same	1	2.4	2.4	73.2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Same as previous, also AASHTO RAC meetings, TRB, peer exchange, regional meeting	1	2.4	2.4	75.6
	Some form of direct contact, telephone or email, list serv, etc	1	2.4	2.4	78.0
	Telephone and e-mail	1	2.4	2.4	80.5
	Telephone, personal e-mail	1	2.4	2.4	82.9
	TRIPS, RIP, tech briefs, e-mails/mtgs/call, tris and rip	1	2.4	2.4	85.4
	tris, rip, conferences, newsletter	1	2.4	2.4	87.8
	TRIS, RIP, tech briefs, conferences	1	2.4	2.4	92.7
	webpage	1	2.4	2.4	95.1
	webpage, listserv	1	2.4	2.4	97.6
	website, peer exchange	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

aNote: most common methods to reach other DOT research offices

email	39%
webpage	22%
conferences/meetings	17%
TRIPS/RIP	17%

**Q21: Which of the following promotional communication tools do you employ to reach the general public:**

**Q21A office and /or DOT newsletters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	9	22.0	22.0	22.0
	2 no	32	78.0	78.0	100.0
	Total	41	100.0	100.0	

**Q21A1 Is it provided in hard-copy, electronically, or both?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 electronically	2	4.9	25.0	25.0
	3 both	6	14.6	75.0	100.0
	Total	8	19.5	100.0	
Missing	System	33	80.5		
Total		41	100.0		

**Q21A2 How often is it published?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	33	80.5	80.5	80.5
monthly	1	2.4	2.4	82.9
quarterly	7	17.1	17.1	100.0
Total	41	100.0	100.0	

**Q21A3 How many pages?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	29	70.7	70.7	70.7
no	3	7.3	7.3	78.0
1-2	1	2.4	2.4	80.5
1	1	2.4	2.4	82.9
16	1	2.4	2.4	85.4
3-4	1	2.4	2.4	87.8
4-6	2	4.9	4.9	92.7
4	2	4.9	4.9	97.6
8	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q21B news releases**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	14	34.1	34.1	34.1
2 no	27	65.9	65.9	100.0
Total	41	100.0	100.0	

**Q21C pitch stories to media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	10	24.4	24.4	24.4
2 no	31	75.6	75.6	100.0
Total	41	100.0	100.0	

**Q21D brochure**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q21E tech briefs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	6	14.6	14.6	14.6
	2 no	35	85.4	85.4	100.0
	Total	41	100.0	100.0	

**Q21F research office web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	20	48.8	48.8	48.8
	2 no	21	51.2	51.2	100.0
	Total	41	100.0	100.0	

**Q21F1 Does it include an email link**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	13	31.7	31.7	31.7
	2 no	28	68.3	68.3	100.0
	Total	41	100.0	100.0	

**Q21G letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	12.2	12.2	12.2
	2 no	36	87.8	87.8	100.0
	Total	41	100.0	100.0	

**Q21H speech/presentations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	12.2	12.2	12.2
	2 no	36	87.8	87.8	100.0
	Total	41	100.0	100.0	

**Q21J telephone**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	9	22.0	22.0	22.0
	2 no	32	78.0	78.0	100.0
	Total	41	100.0	100.0	

**Q21K personal email**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q21L public meetings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	22.0	22.0	22.0
2 no	32	78.0	78.0	100.0
Total	41	100.0	100.0	

**Q21M conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	5	12.2	12.2	12.2
2 no	36	87.8	87.8	100.0
Total	41	100.0	100.0	

**Q21P annual reports**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	4	9.8	9.8	9.8
2 no	37	90.2	90.2	100.0
Total	41	100.0	100.0	

**Q21N other**

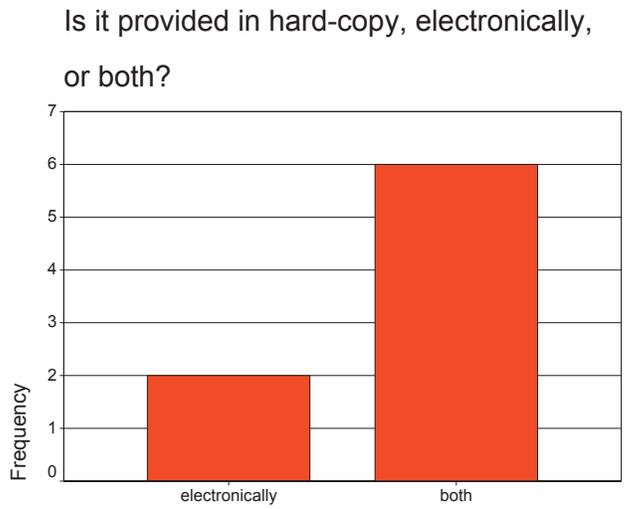
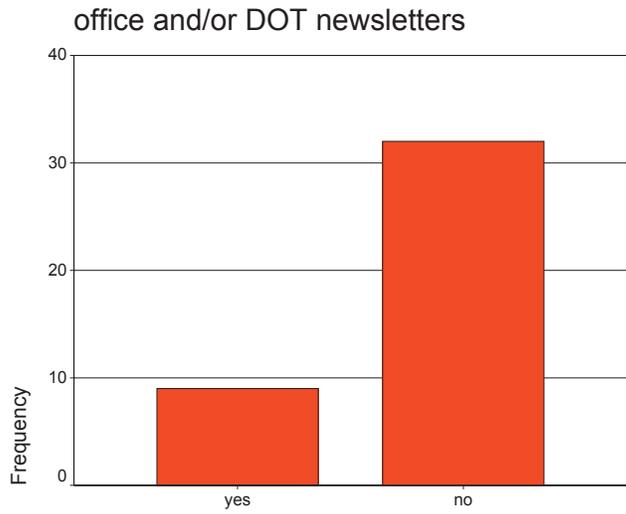
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	2.4	2.4	2.4
2 no	40	97.6	97.6	100.0
Total	41	100.0	100.0	

**Q21N1 specify**

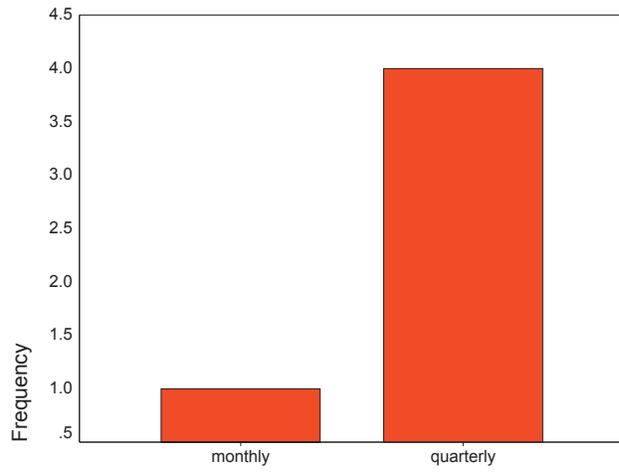
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	39	95.1	95.1	95.1
TRIS	1	2.4	2.4	97.6
no	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q210 none**

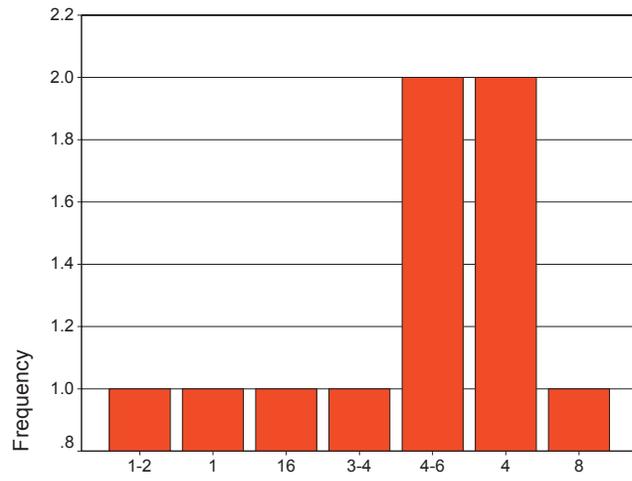
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	9	22.0	22.0	22.0
	2 no	32	78.0	78.0	100.0
	Total	41	100.0	100.0	



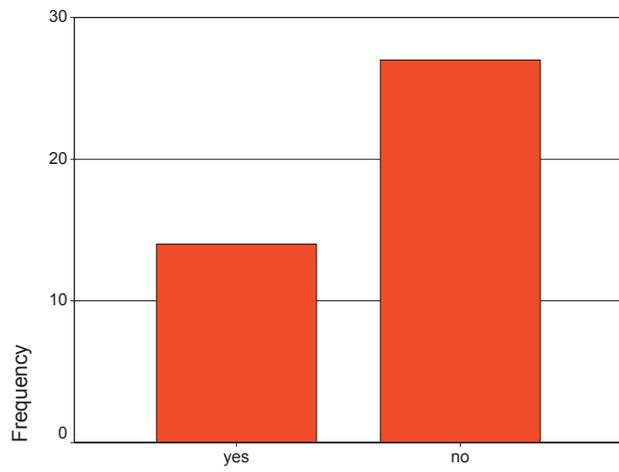
How often is it published?

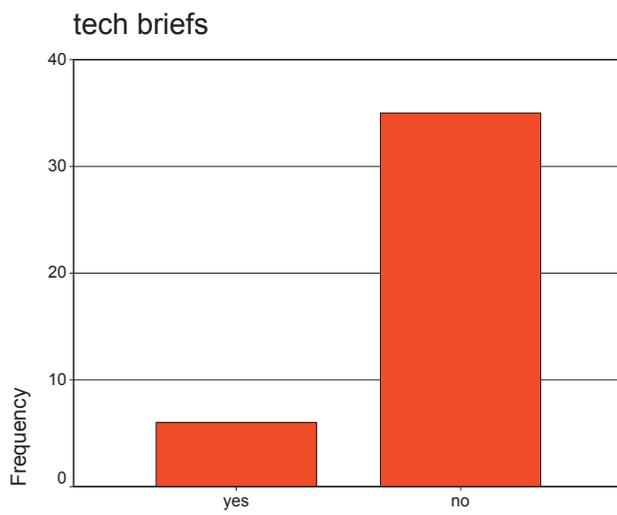
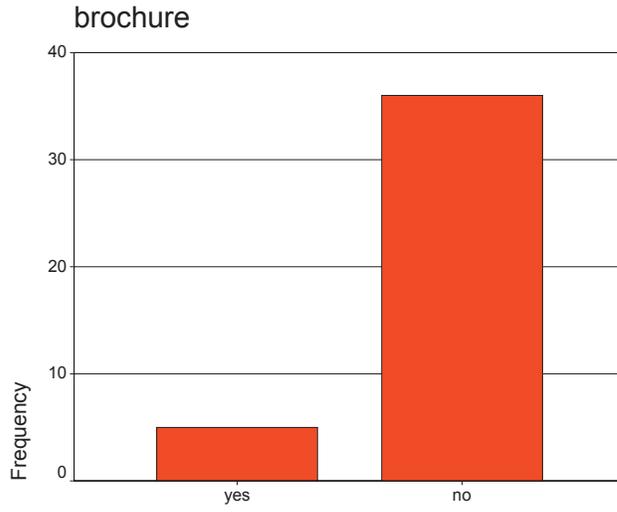
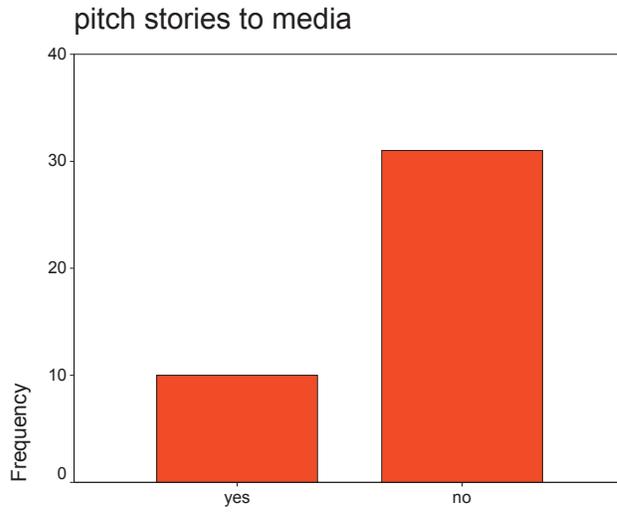


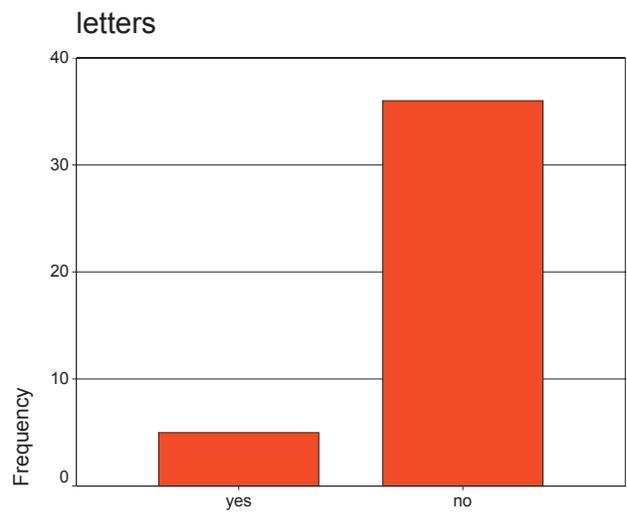
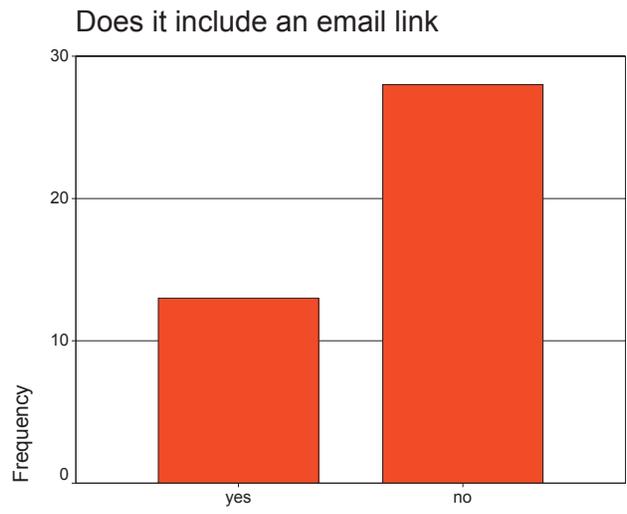
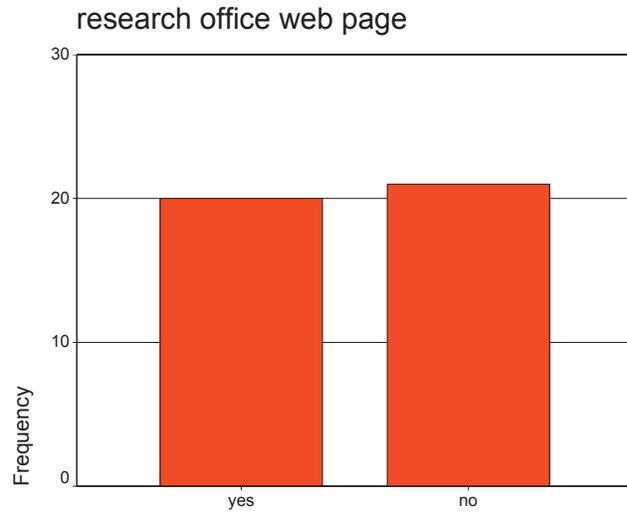
How many pages?

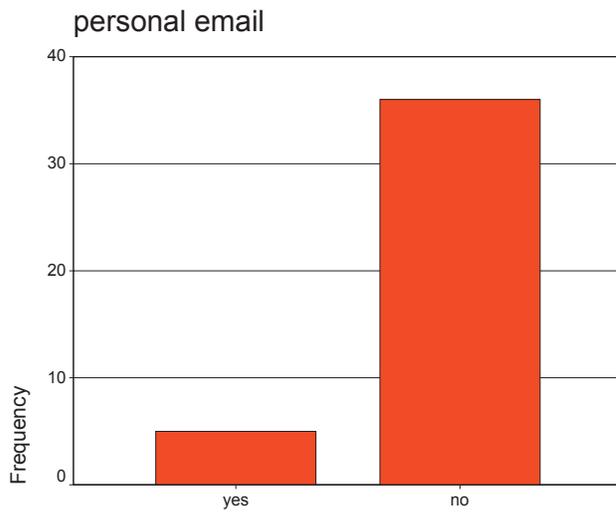
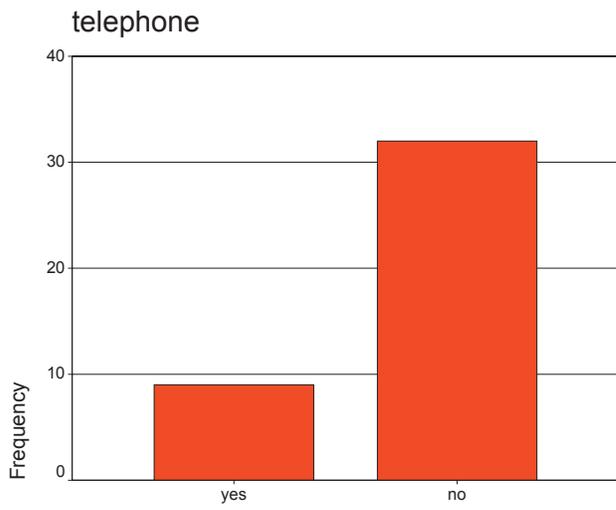
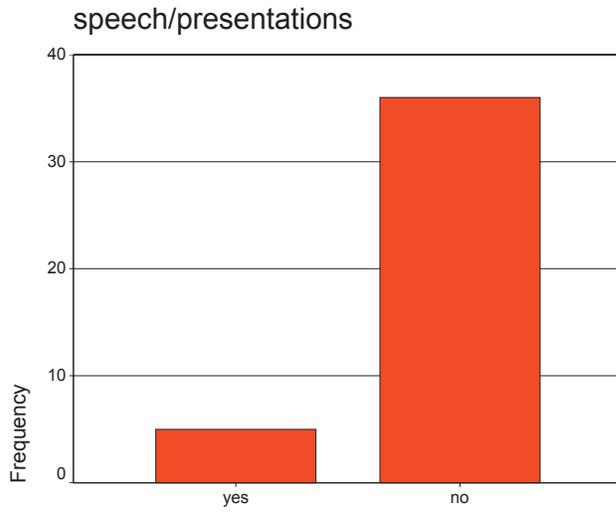


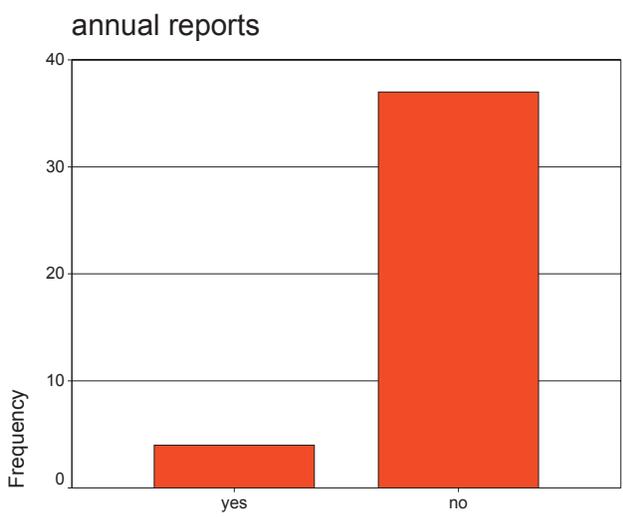
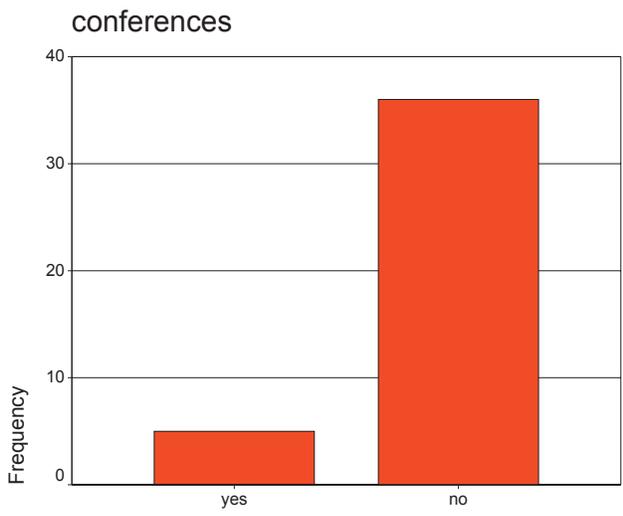
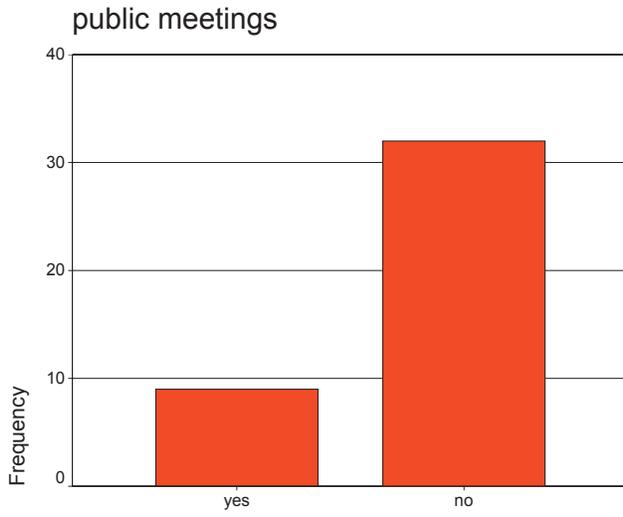
news releases











**Q22: Which promotional methods do you believe are most effective for reaching the general public? (These may or may not be the same methods you are currently using.)a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	24.4	24.4	24.4
A special web page to receive public concerns, comments and general feedback and news releases	1	2.4	2.4	26.8
DOTpublic affairs office, TV/radio, meetings	1	2.4	2.4	29.3
customer service, radio, television	1	2.4	2.4	31.7
Media	1	2.4	2.4	34.1
Media and releases	1	2.4	2.4	36.6
media or web page	1	2.4	2.4	39.0
News release for selected projects of interest to the public	1	2.4	2.4	41.5
news release, articles in journals	1	2.4	2.4	43.9
news releases	2	4.9	4.9	48.8
News releases	2	4.9	4.9	53.7
News releases and pitches to the media are probabaly best	1	2.4	2.4	56.1
News releases, pitching stories to media and public meeting(at fairs, rest stops, etc.)	1	2.4	2.4	58.5
News releases, website	1	2.4	2.4	61.0
News stories	1	2.4	2.4	63.4
news stories, tv or radio, brochures	1	2.4	2.4	65.9
phone, email, public meetings	1	2.4	2.4	68.3
Press releases	1	2.4	2.4	70.7
Reseach office web page	1	2.4	2.4	73.2
Research Web Pages	1	2.4	2.4	75.6
This is primarily accomplished through the Department's Media and Marketing Services section of the Director's Staff, not by individual offices	1	2.4	2.4	78.0
those noted, plus site visits	1	2.4	2.4	80.5
We don't contact the general public, we believe that too much exposure of our program to the general public could do more harm than good	1	2.4	2.4	82.9
We need to do more	1	2.4	2.4	85.4
web page	1	2.4	2.4	87.8
webpage, newsletter, conferences	1	2.4	2.4	90.2
webpages, conferences	1	2.4	2.4	92.7
website	3	7.3	7.3	100.0
Total	41	100.0	100.0	

a.

Note: Most common methods to reach the general public:

media	39%
webpages	22%
conferences	10%

**Q23: Which of the following promotional communication tools do you employ to reach consultants?****Q23A office and /or DOT newsletters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	14	34.1	35.0	35.0
	2 no	26	63.4	65.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23A1 Is it provided in hard-copy, electronically, or both?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 hard copy	1	2.4	2.5	2.5
	2 electronically	30	73.2	75.0	77.5
	3 both	9	22.0	22.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23A2 How often is it published?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		29	70.7	70.7	70.7
	monthly	1	2.4	2.4	73.2
	quarterly	10	24.4	24.4	97.6
	semi-annual	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

**Q23A3 How many pages?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		26	63.4	63.4	63.4
	0	1	2.4	2.4	65.9
	1-2	1	2.4	2.4	75.6
	16	1	2.4	2.4	78.0
	2	1	2.4	2.4	80.5
	3-4	1	2.4	2.4	82.9
	4-6	2	4.9	4.9	87.8
	4	3	7.3	7.3	95.1
	8-12	1	2.4	2.4	97.6
	8	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

**Q23B news releases**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	5	12.2	12.5	12.5
	2 no	35	85.4	87.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23C brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	9.8	10.0	10.0
	2 no	36	87.8	90.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23D tech briefs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	7	17.1	17.5	17.5
	2 no	33	80.5	82.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23E feature articles**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	11	26.8	27.5	27.5
	2 no	29	70.7	72.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23F research office web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	17	41.5	42.5	42.5
	2 no	23	56.1	57.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23F1 Does it have an email link?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	12	29.3	30.0	30.0
	2 no	28	68.3	70.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23G chat room or electronic bulletin board**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	40	97.6	100.0	100.0
Missing	System	1	2.4		
Total		41	100.0		

**Q23H listserv/electronic mailing list**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3	7.3	7.5	7.5
	2 no	37	90.2	92.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23I letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	8	19.5	20.0	20.0
	2 no	32	78.0	80.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23J speeches**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	12	29.3	30.0	30.0
	2 no	28	68.3	70.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23K telephone**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	19	46.3	47.5	47.5
	2 no	21	51.2	52.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23L personal email**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	17	41.5	42.5	42.5
	2 no	23	56.1	57.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23M office visits**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	8	19.5	20.0	20.0
	2 no	32	78.0	80.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23N conference meeting**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	17	41.5	42.5	42.5
	2 no	23	56.1	57.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q23R annual reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	6	14.6	15.0	15.0
	2 no	34	82.9	85.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q230 other**

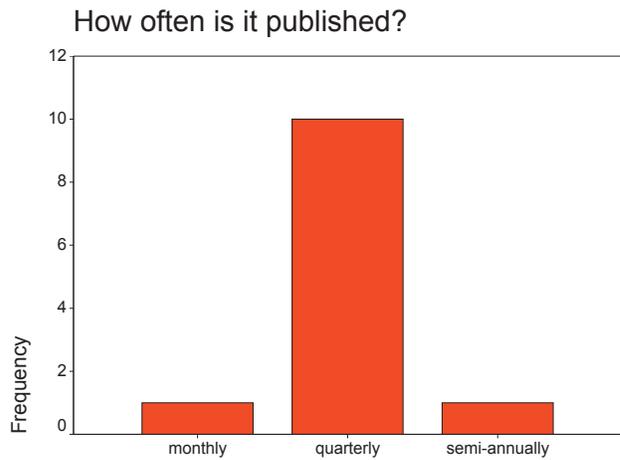
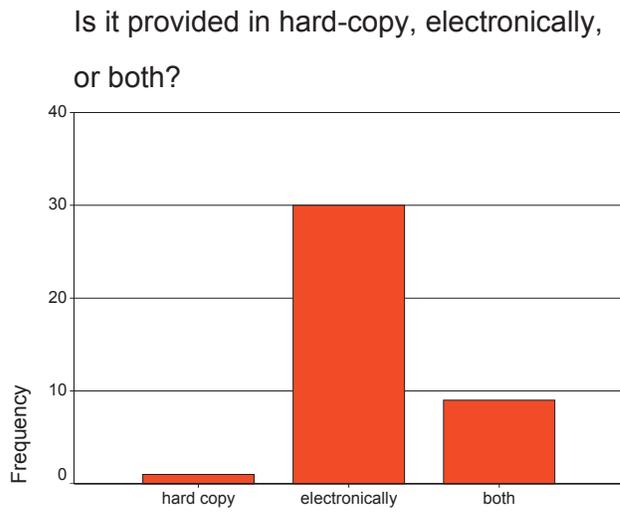
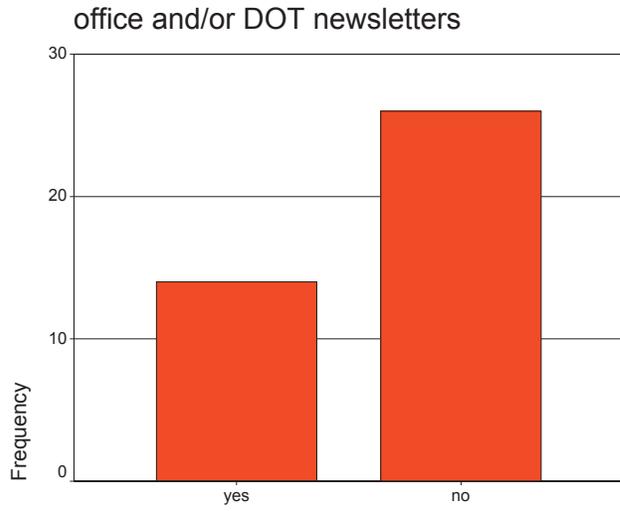
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	7	17.1	17.5	17.5
	2 no	33	80.5	82.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

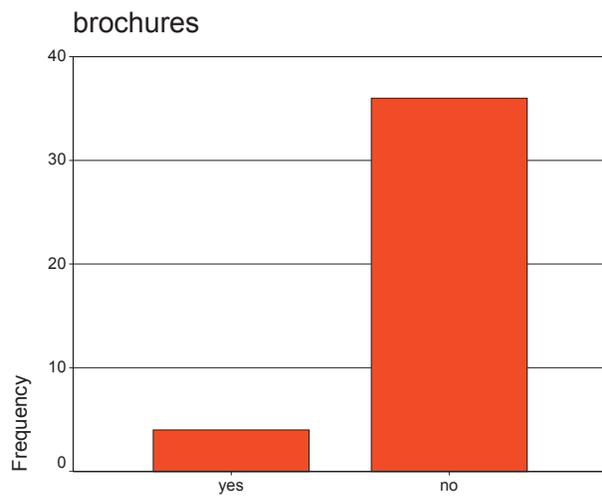
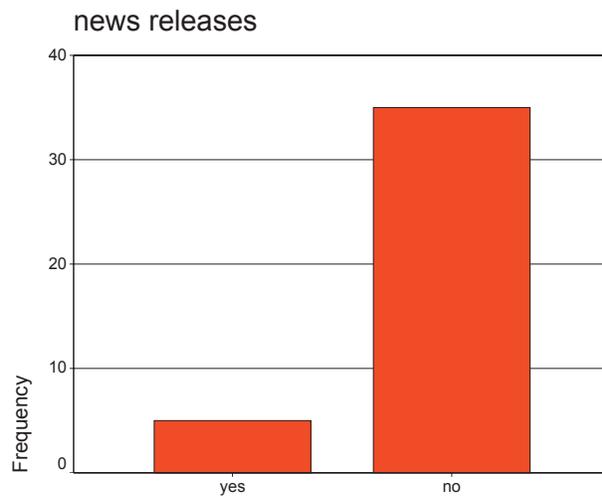
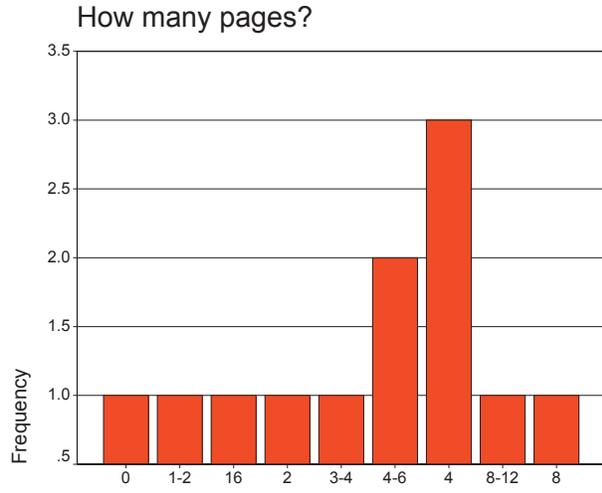
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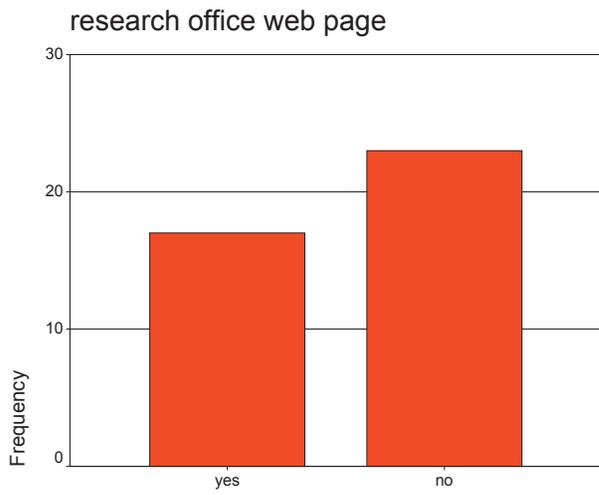
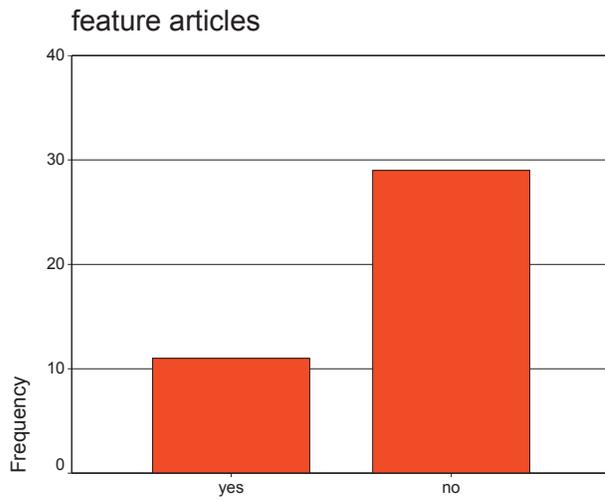
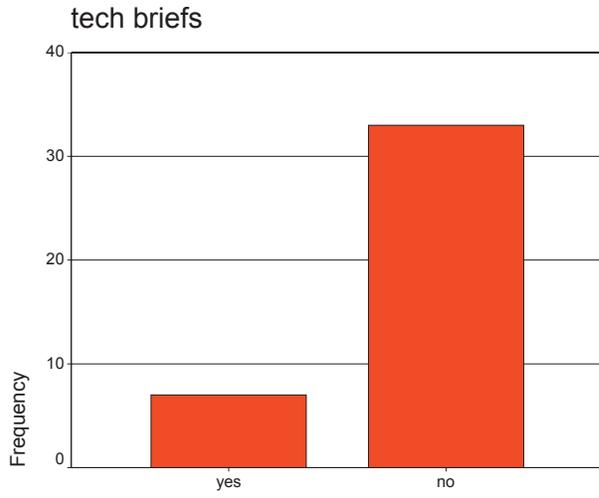
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		34	82.9	82.9	82.9
	annual research showcase	1	2.4	2.4	85.4
	Host training	1	2.4	2.4	87.8
	personal visits, include on project technical panels, invite research suggestions	1	2.4	2.4	90.2
	professional transportation	1	2.4	2.4	92.7
	Project abstract with electronic link to report	1	2.4	2.4	95.1
	Research showcase at TRB Annual Contractors Convention	1	2.4	2.4	97.6
	TRIS, TRIS RiP Research Showcase	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

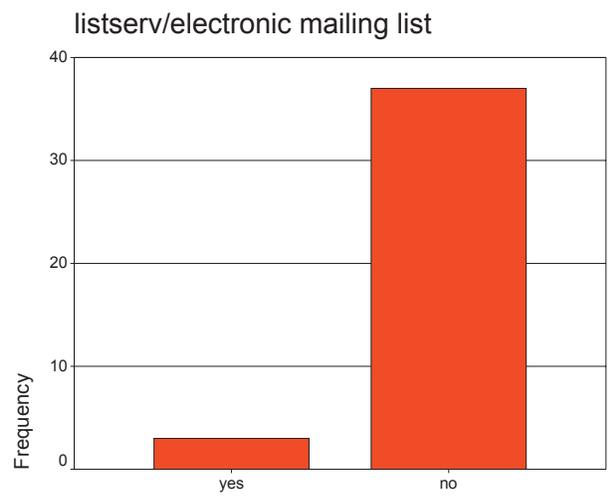
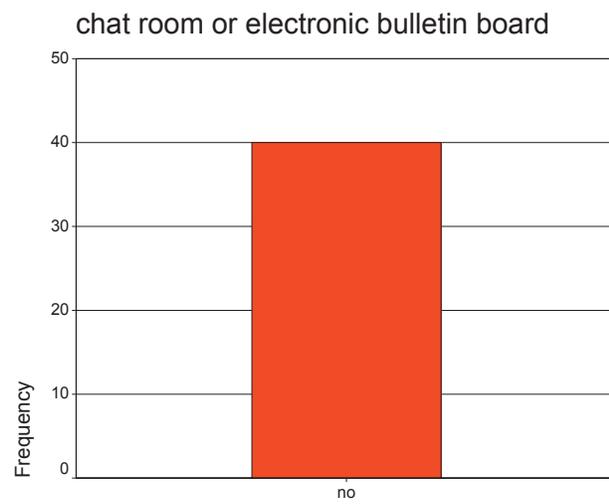
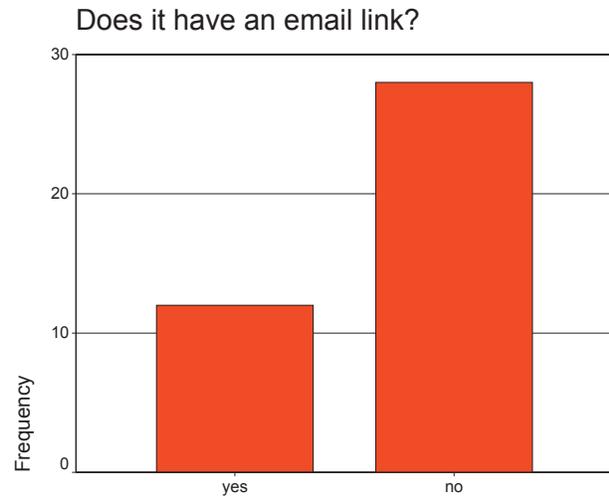
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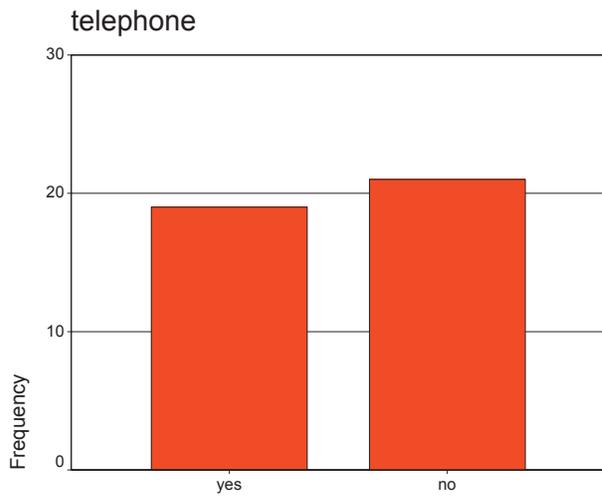
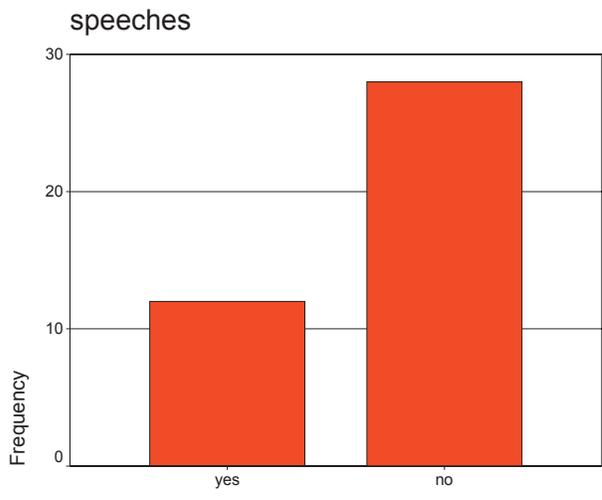
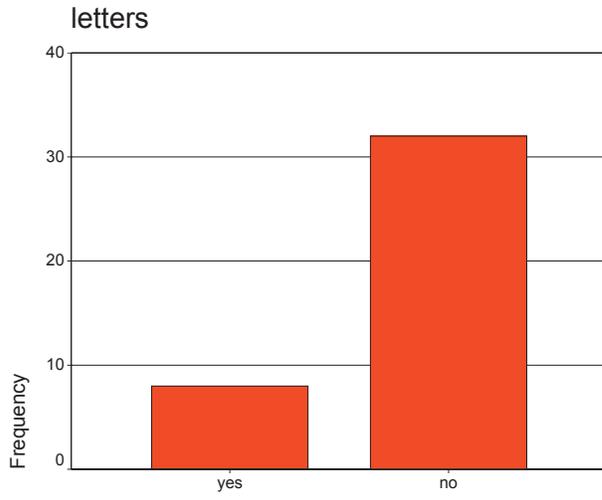
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	6	14.6	15.0	15.0
	2 no	34	82.9	85.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

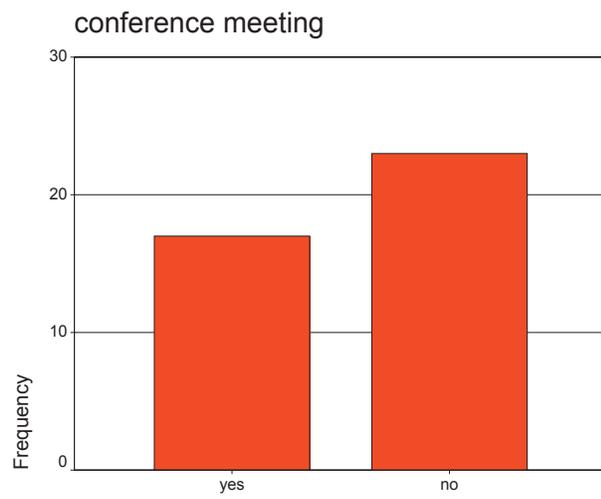
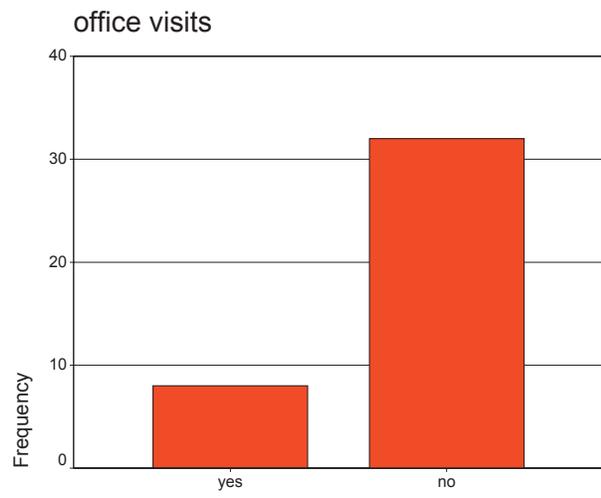
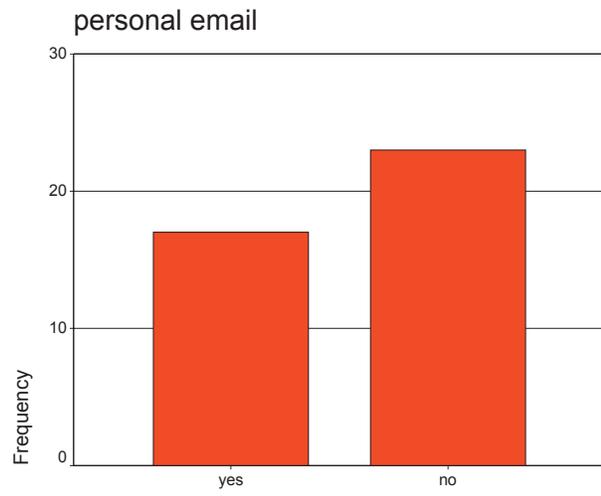


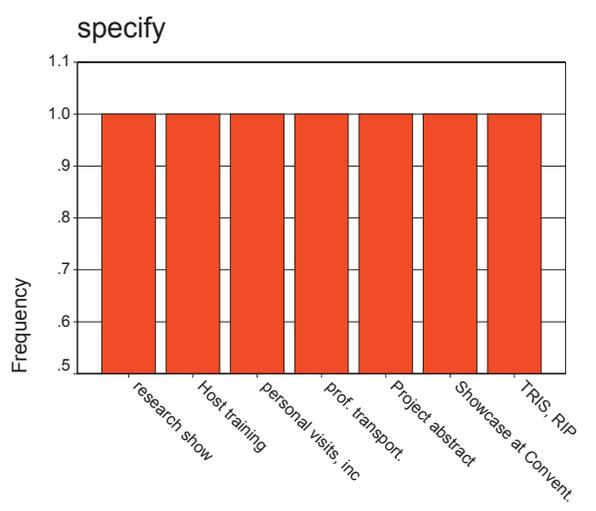
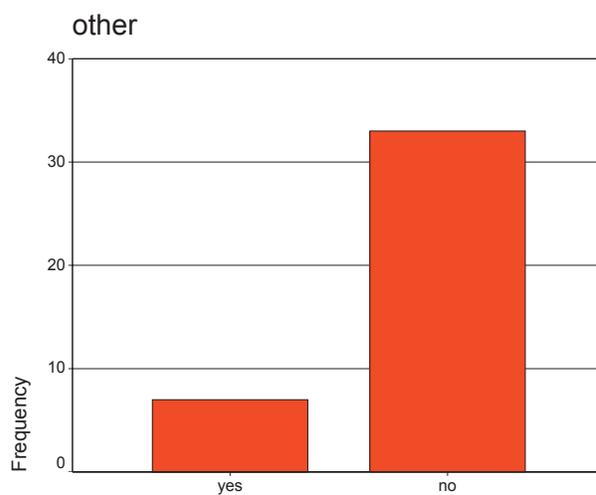
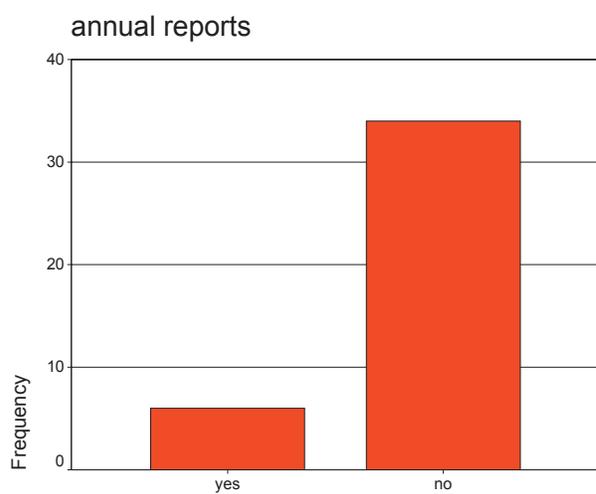


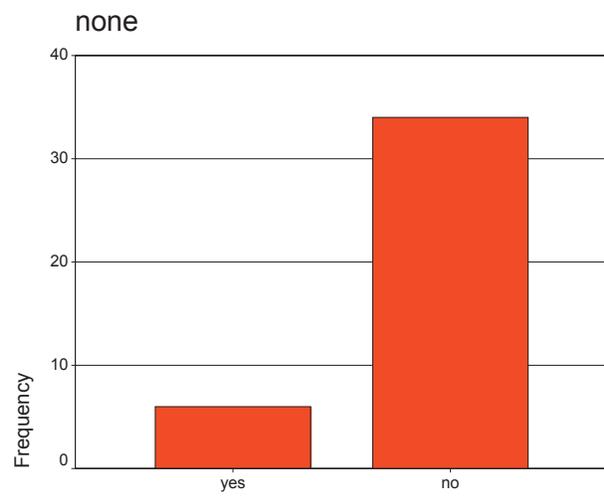












**Q24: Which promotional methods do you believe are most effective for reaching consultants? (These may or may not be the same methods you are currently using.)a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14	34.1	34.1	34.1
Attendance at Annual Conference, website	1	2.4	2.4	36.6
conferences/meetings, telephone, personal e-mail	1	2.4	2.4	39.0
Consultants want our business. We don't need to or try to recruit them. More often than not they're a nuisance. A few receive our quarterly newsletter as a courtesy	1	2.4	2.4	41.5
email, conferences	1	2.4	2.4	43.9
letters	1	2.4	2.4	46.3
Letters, telephone	1	2.4	2.4	48.8
newsletter, conferences/meetings, web page	1	2.4	2.4	51.2
newsletter, professional conferences, annual reports	1	2.4	2.4	53.7
none	1	2.4	2.4	56.1
office visit	1	2.4	2.4	58.5
Our consultant coordination section provides most of the communication.	1	2.4	2.4	61.0
Personal contacts are best followed by	1	2.4	2.4	63.4
conferences/meetings	1	2.4	2.4	65.9
presentations, conferences, website	1	2.4	2.4	68.3
Research office web page	1	2.4	2.4	70.7
Research web pages, TRIS, TRIS RiP, TRB, Annual Meeting, TRB Journals	1	2.4	2.4	73.2
RFP's, website	1	2.4	2.4	75.6
speeches and presentations	1	2.4	2.4	78.0
Tech briefs, Internet Web Pages, annual report	1	2.4	2.4	80.5
Telephone	1	2.4	2.4	82.9
telephone, email. training	1	2.4	2.4	85.4
Through referrals from universities, other consultants, internal contacts	1	2.4	2.4	87.8
We don't specifically target consultants	1	2.4	2.4	90.2
We don't use design consultants in teh department unless there are special circumstances. We occasionally use research consultants.	1	2.4	2.4	92.7
Web page	1	2.4	2.4	95.1
web page, letters	1	2.4	2.4	97.6
web page, technical summaries	1	2.4	2.4	100.0
website	1	2.4	2.4	
Total	41	100.0	100.0	

a.

Note: Most common methods to reach consultants:

websites	27%
conferences	20%
letters	12%
telephone	10%
emails	7%

**Q25: Which of the following promotional communication tools do you employ to reach internal DOT constituents?**

**Q25A office and /or DOT newsletters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	29	70.7	70.7	70.7
2 no	12	29.3	29.3	100.0
Total	41	100.0	100.0	

**Q25A1 Is it provided in hard-copy, electronically, or both?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 hard copy	2	4.9	4.9	4.9
2 electronically	21	51.2	51.2	56.1
3 both	18	43.9	43.9	100.0
Total	41	100.0	100.0	

**Q25A2 How often is it published?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	48.8	48.8	48.8
annually	2	4.9	4.9	53.7
intermitt.	1	2.4	2.4	56.1
monthly	1	2.4	2.4	58.5
quarterly	14	34.1	34.1	92.7
semi-annually	3	7.3	7.3	100.0
Total	41	100.0	100.0	

**Q25A3 How many pages?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	48.8	48.8	48.8
>16	1	2.4	2.4	51.2
1-8	17	41.5	41.5	92.7
8-16	1	2.4	2.4	95.1
front and back	1	2.4	2.4	97.6
variable	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q25B news releases**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	4	9.8	9.8	9.8
	2 no	37	90.2	90.2	100.0
	Total	41	100.0	100.0	

**Q25C brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	13	31.7	31.7	31.7
	2 no	28	68.3	68.3	100.0
	Total	41	100.0	100.0	

**Q25D tech briefs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	24	58.5	58.5	58.5
	2 no	17	41.5	41.5	100.0
	Total	41	100.0	100.0	

**Q25E feature articles**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	15	36.6	36.6	36.6
	2 no	26	63.4	63.4	100.0
	Total	41	100.0	100.0	

**Q25F research office web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	31	75.6	75.6	75.6
	2 no	10	24.4	24.4	100.0
	Total	41	100.0	100.0	

**Q25F1 Does it have an email link?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	20	48.8	50.0	50.0
	2 no	20	48.8	50.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

**Q25G chat room or electronic bulletin board**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	4.9	4.9	4.9
2 no	39	95.1	95.1	100.0
Total	41	100.0	100.0	

**Q25H listserv/electronic mailing list**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	22.0	22.0	22.0
2 no	32	78.0	78.0	100.0
Total	41	100.0	100.0	

**Q25I inter-office memos/correspondence**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	36	87.8	90.0	90.0
2 no	4	9.8	10.0	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

**Q24J speech/presentations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	28	68.3	68.3	68.3
2 no	13	31.7	31.7	100.0
Total	41	100.0	100.0	

**Q25K telephone**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	33	80.5	80.5	80.5
2 no	8	19.5	19.5	100.0
Total	41	100.0	100.0	

**Q25L personal email**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	37	90.2	90.2	90.2
2 no	4	9.8	9.8	100.0
Total	41	100.0	100.0	

**Q25M meetings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	36	87.8	87.8	87.8
2 no	5	12.2	12.2	100.0
Total	41	100.0	100.0	

**Q25N informal discussions**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	35	85.4	87.5	87.5
2 no	5	12.2	12.5	100.0
Total	40	97.6	100.0	
Missing System	1	2.4		
Total	41	100.0		

**Q25Q annual reports**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	22	53.7	53.7	53.7
2 no	19	46.3	46.3	100.0
Total	41	100.0	100.0	

**Q25O other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	8	19.5	19.5	19.5
2 no	33	80.5	80.5	100.0
Total	41	100.0	100.0	

**Q2501 specify-a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	33	80.5	80.5	80.5
conferences and workshops	1	2.4	2.4	82.9
disseminating research information	1	2.4	2.4	85.4
e-mail alerts, research publication	1	2.4	2.4	87.8
Quarterly meetings/Annual research showc	1	2.4	2.4	90.2
research coordinator-our primary point of contact within each client office	1	2.4	2.4	92.7
Research showcase, Annual TRB visitation program, annual meeting with Department	1	2.4	2.4	95.1
training	1	2.4	2.4	97.6
training sessions	1	2.4	2.4	100.0
Total	41	100.0	100.0	

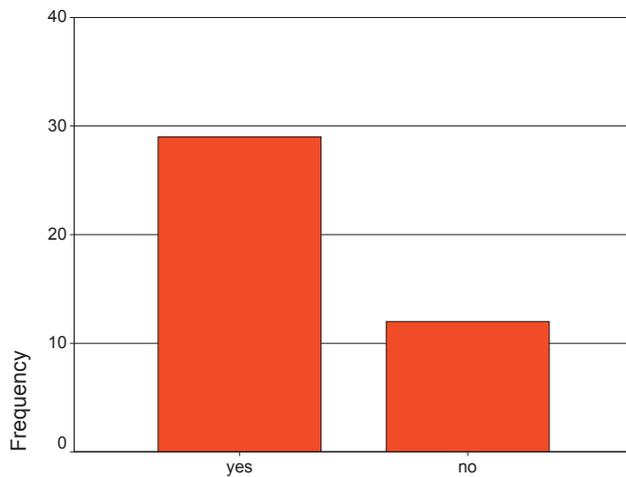
a.

Note: Most common results:  
 research publication 12%  
 training 5%

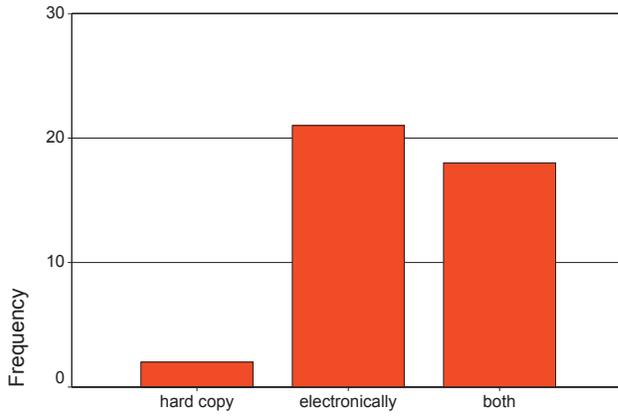
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	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	41	100.0	100.0	100.0

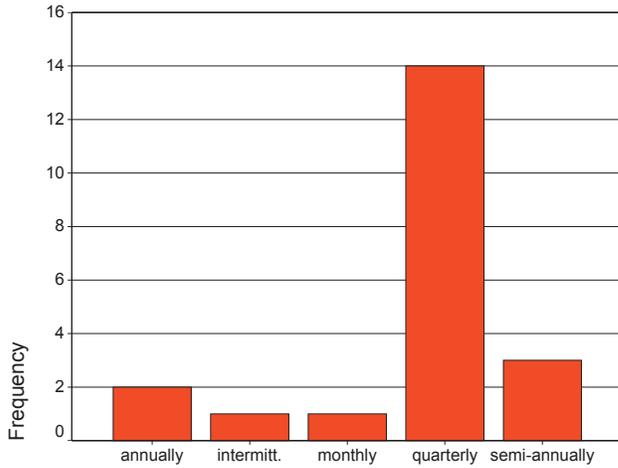
office and/or DOT newsletter



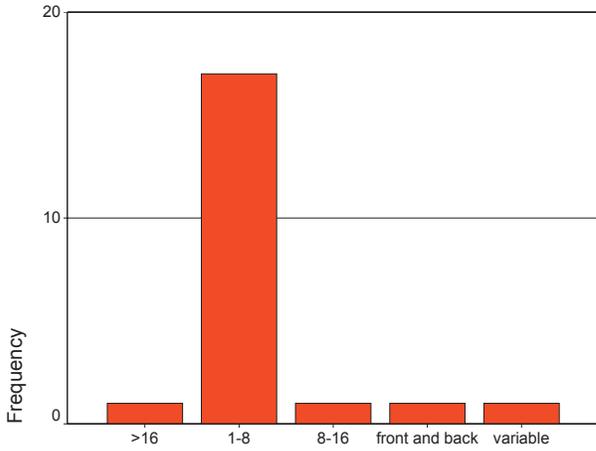
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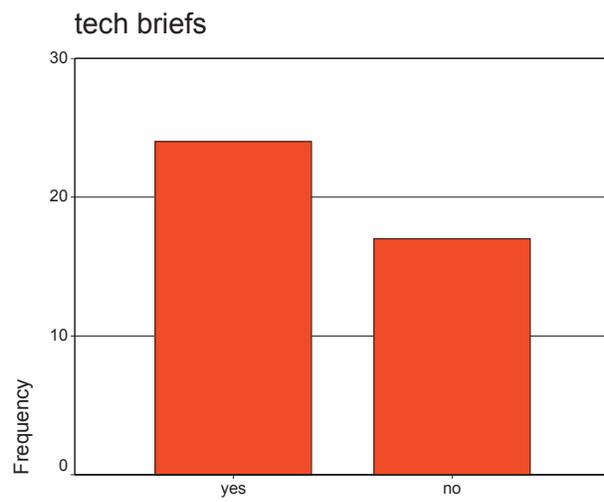
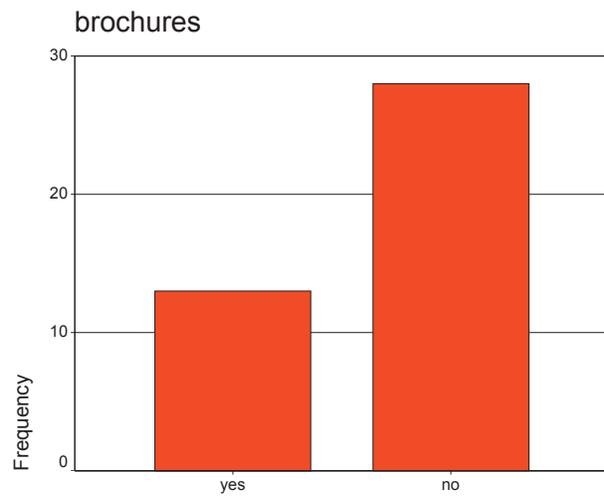
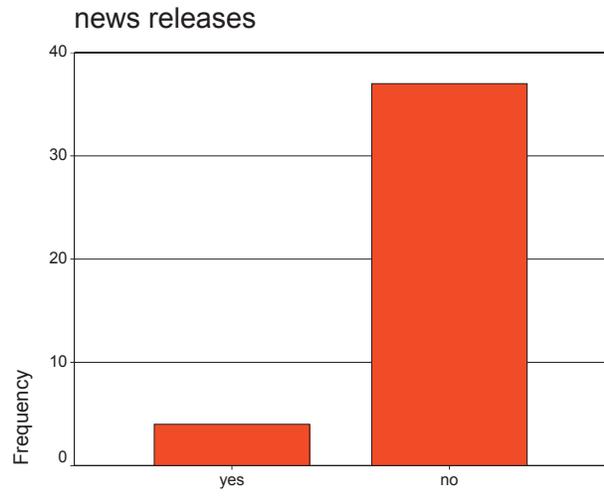


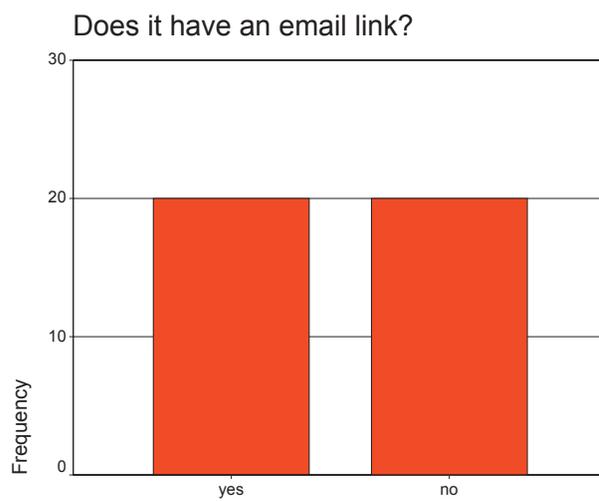
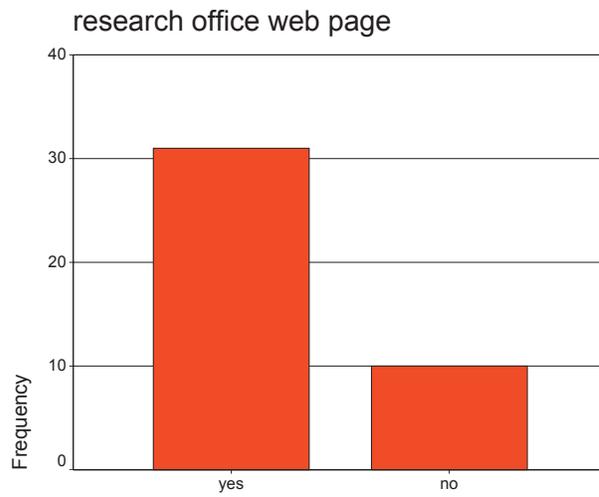
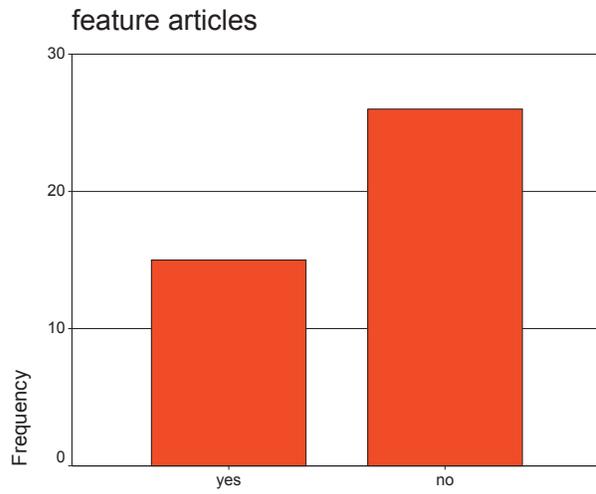
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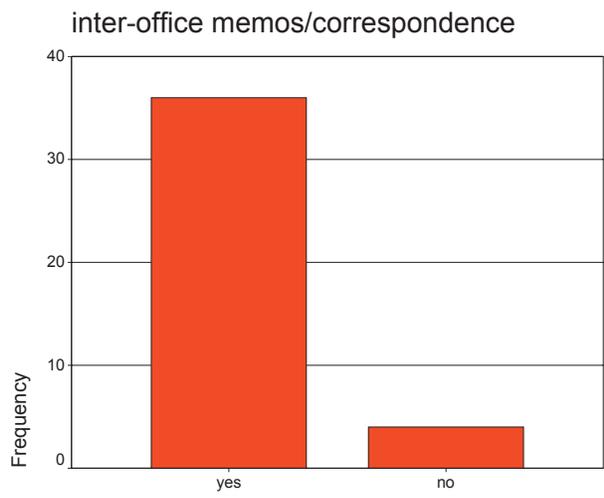
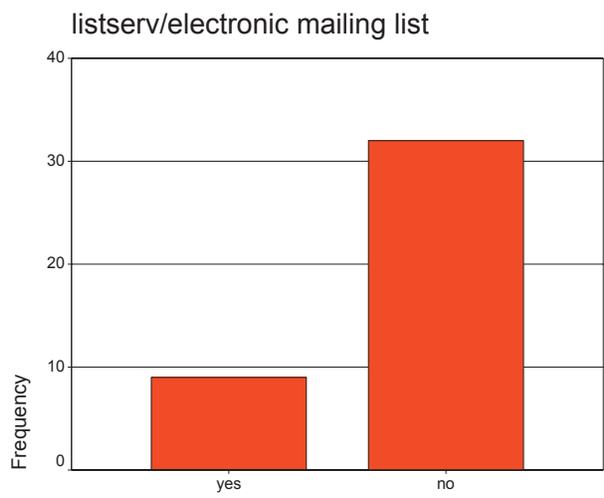
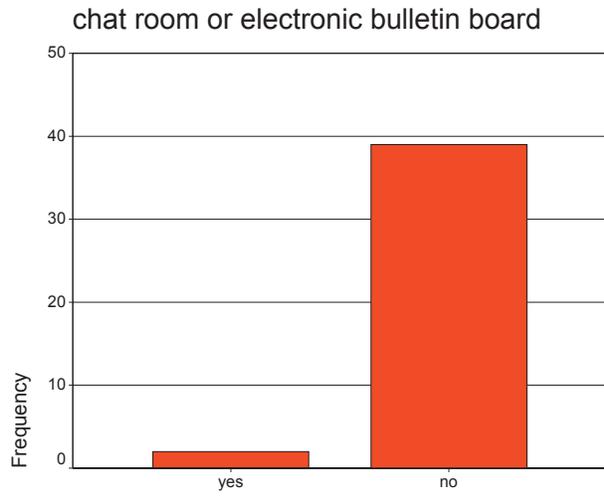


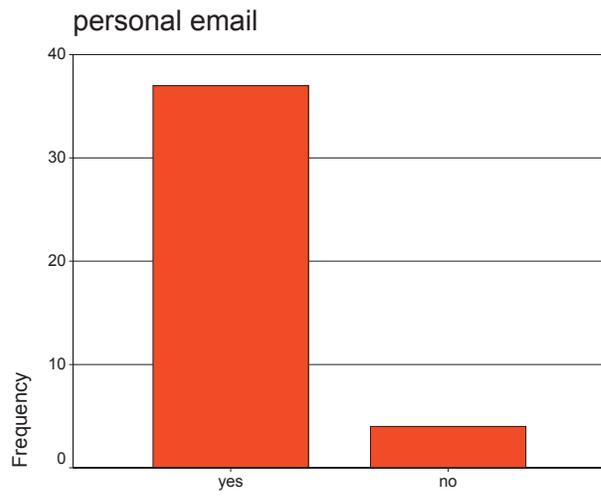
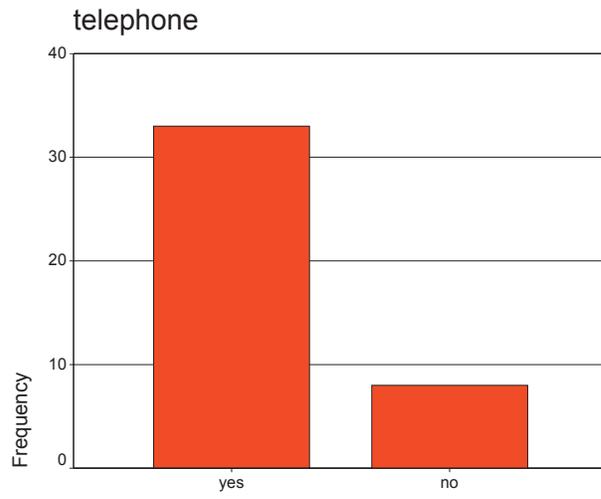
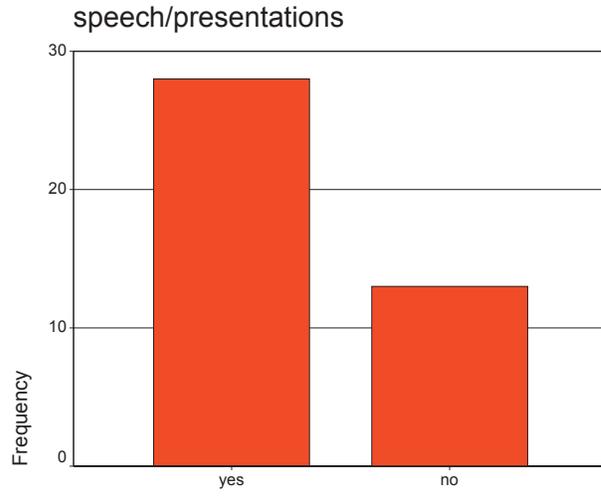
How many pages?

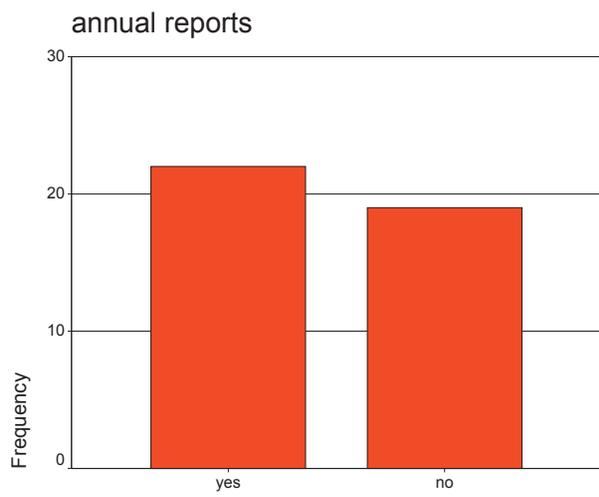
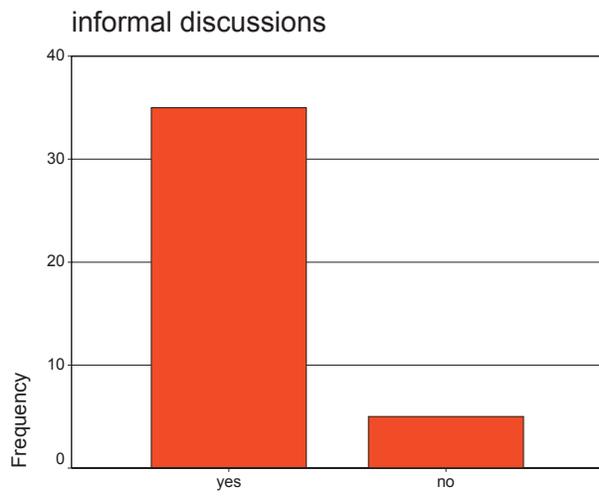
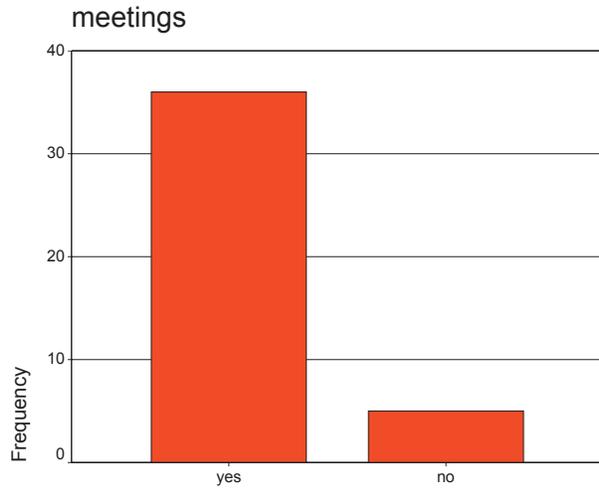


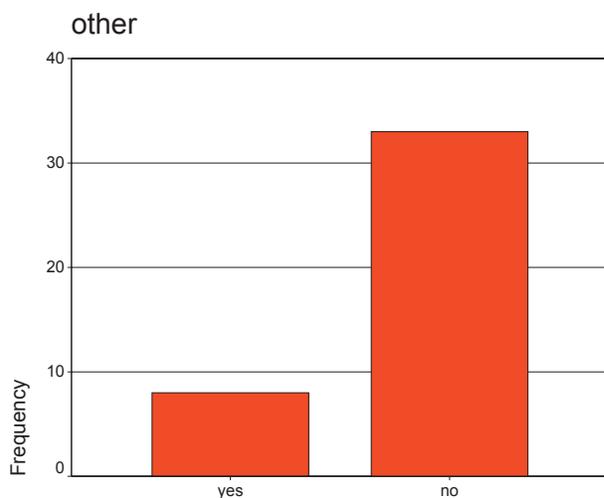












**Q26: Which promotional methods do you believe are most effective for reaching internal DOT constituents? (These may or may not be the same methods you are currently using.)a**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	9.8	9.8	9.8
All of the above	1	2.4	2.4	12.2
annual research needs solicitation, telephone, email, informal discussions, meetings, Triennial Research Showcase, Annual TRB Visitation, annual meeting with Department execs/Managers and Conn Academy of Science and Engineering	1	2.4	2.4	14.6
e-mail, phone and meetings	1	2.4	2.4	17.1
Each method is effective depending on the circumstances	1	2.4	2.4	19.5
Electronic Bulletin Board, website	1	2.4	2.4	22.0
face to face meetings	1	2.4	2.4	24.4
highway research council, bi-annual research outreach, newsletter	1	2.4	2.4	26.8
informal discussion, email.phone, tech briefs, websites	1	2.4	2.4	29.3
Informal discussions	1	2.4	2.4	31.7
Informal discussions followed by meetings. We try to show the importance of individual involvement.	1	2.4	2.4	34.1
informal discussions, personal email	1	2.4	2.4	36.6
Inter-office memos, telephone, personal e-mail	1	2.4	2.4	39.0
meetings	1	2.4	2.4	41.5
Meetings and informal discussions	1	2.4	2.4	43.9

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid meetings with individual units and personal contact, webpage in future	1	2.4	2.4	46.3
meetings, email	1	2.4	2.4	48.8
Meetings, email, articles	1	2.4	2.4	51.2
newsletters, web page, memos, email, phone, meetings	1	2.4	2.4	53.7
newsletters, website, informal discussions, posters, articles/ads in DOT newsletter, words of mouth, staff meetings, conferences, NHDOT RAC meetings, intranet, etc	1	2.4	2.4	56.1
Office visits/presentations, emails and phone calls	1	2.4	2.4	58.5
personal contact and presentations	1	2.4	2.4	61.0
personal contact is best, email next best	1	2.4	2.4	63.4
personal networking	1	2.4	2.4	65.9
phone, email, website, meetings, training	1	2.4	2.4	68.3
presentations at their staff meetings, web page, newsletter	1	2.4	2.4	70.7
quarterly meetings/annual research showcase	1	2.4	2.4	73.2
Research office web page, newsletter, feature article in other internal publications, personal e-mail, meetings, informal discussions	1	2.4	2.4	75.6
Same	1	2.4	2.4	78.0
Some form of direct contact, telephone or email, list serv, etc	1	2.4	2.4	80.5
speeches/presentations	1	2.4	2.4	82.9
Tech briefs, Internet Web pages, annual report, personal e-mail	1	2.4	2.4	85.4
telephone, e-mails, mtgs., informal discussions	1	2.4	2.4	87.8
telephone, personal e-mail, meetings	1	2.4	2.4	90.2
webpage, email	1	2.4	2.4	92.7
website, email. presentations at conferences	1	2.4	2.4	95.1
website, presentations, meetings, informal discussions	1	2.4	2.4	97.6
word of mouth, newsletters, meetings	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a.

Note: Most common methods to reach internal constituents:

meetings	41%
emails	41%
webpages	29%

telephone 24%  
 personal contacts 15%  
 newsletters 7%

**Q27: Some DOT constituents may have different or more specific interests in your research program than others. Do you use separate or different communication methods to reach these particular DOT constituents?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	18	43.9	46.2	46.2
	2 no	21	51.2	53.8	100.0
	Total	39	95.1	100.0	
Missing	System	2	4.9		
Total		41	100.0		

**Q27A If yes, please specify the differences<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23	56.1	56.1	56.1
email, tel, and personal contact	1	2.4	2.4	58.5
frequent exposure at meetings	1	2.4	2.4	61.0
Inform different constituents of only those items that may be of interest to them	1	2.4	2.4	63.4
informal discussion, email. or presentations for more interested parties	1	2.4	2.4	65.9
many meetings	1	2.4	2.4	68.3
more targeted contacts	1	2.4	2.4	70.7
Most constituents have narrower interests than our research program addresses since we have a multimodal scope. That's why a combination is more effective.	1	2.4	2.4	73.2
not necessarily different just more contact	1	2.4	2.4	75.6
Occasional face-to-face meetings coupled with brief summary documents of critical info are preferred method of communication by senior leadership. Regular and more detailed contact is necessary with technical liasons and middle managers via e-mail, IOCs,	1	2.4	2.4	78.0
office director vs. research coordinator/champion vs. practitioner/professional not involved in the research program	1	2.4	2.4	80.5
	1	2.4	2.4	82.9

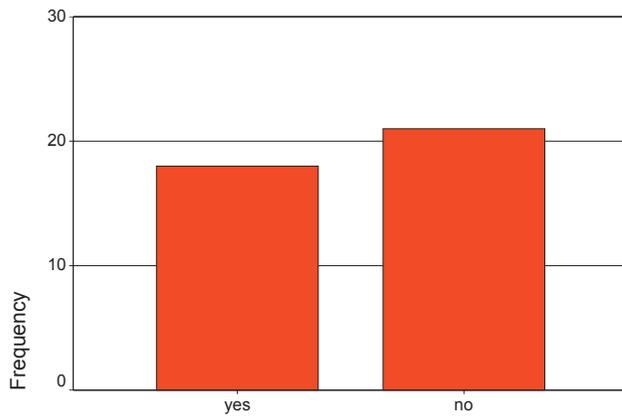
**Q27A If yes, please specify the differences<sup>a</sup>**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	People in the regions respond better to face-to-face visits. They tend to mistrust people from Salem. We try to visit once a year or more with an informal research program presentation, followed by a discussion.	1	2.4	2.4	85.4
	personal briefings with executive staff	1	2.4	2.4	87.8
	presentation targeted at specific user groups	1	2.4	2.4	90.2
	See communication plan. This is evolving to help target tool audience. Our primary audience is internal DOT.	1	2.4	2.4	92.7
	Solicit support from technical lead div for individual research projects	1	2.4	2.4	95.1
	Target specific programs.	1	2.4	2.4	97.6
	those less familiar with program, a mgr. is interested first to serve as a champion	1	2.4	2.4	100.0
	Total	41	100.0	100.0	

a.

Note: Most common results:  
 personal contact 22%  
 meetings 7%

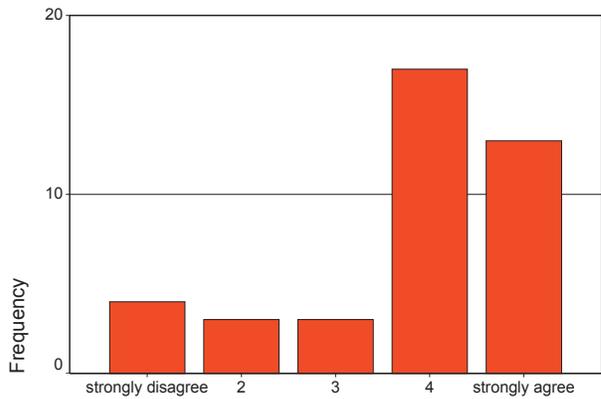
Do you use different communication method to reach the interested internal constituents



**Q28: My research office actively promotes its research activities and successes to internal DOT audiences.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 strongly disagree	4	9.8	10.0	10.0
	2 2	3	7.3	7.5	17.5
	3 3	3	7.3	7.5	25.0
	4 4	17	41.5	42.5	67.5
	5 strongly agree	13	31.7	32.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

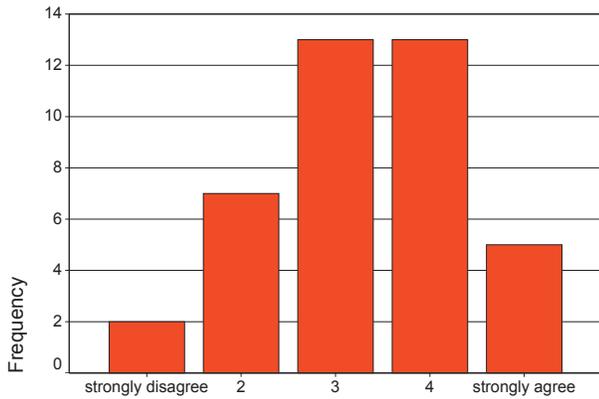
My office actively promotes its research activities&success to DOT audiences



**Q29: My research office actively promotes its research activities and successes to external audiences.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 strongly disagree	2	4.9	5.0	5.0
	2 2	7	17.1	17.5	22.5
	3 3	13	31.7	32.5	55.0
	4 4	13	31.7	32.5	87.5
	5 strongly agree	5	12.2	12.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

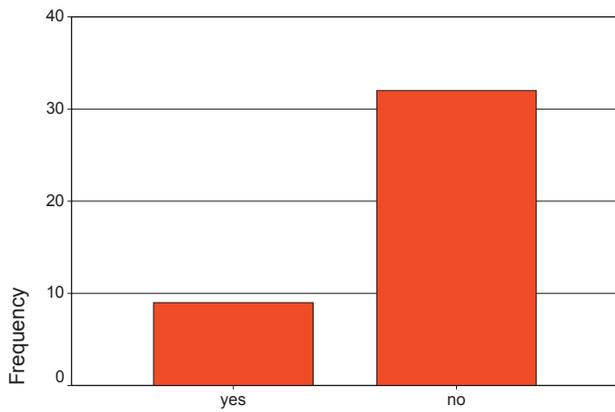
My research office actively promotes its research activities and success



**Q30: Does your research office have a dedicated communications/marketing budget (not including technical programs such as LTAP)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	9	22.0	22.0	22.0
2 no	32	78.0	78.0	100.0
Total	41	100.0	100.0	

Does your research office have a dedicated communication/marketing budget?



**Q31: On average, about how much money is spent annually on communications/marketing?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	22.0	22.0	22.0
0	3	7.3	7.3	31.7
1%	1	2.4	2.4	34.1
10%	1	2.4	2.4	36.6
10000-20000	1	2.4	2.4	39.0
10000	1	2.4	2.4	41.5
120000(websites, technical summaries, etc.)	1	2.4	2.4	43.9
140000	1	2.4	2.4	46.3
15000-20000	1	2.4	2.4	48.8
15000	1	2.4	2.4	51.2
150000	1	2.4	2.4	53.7
152000	1	2.4	2.4	56.1
20000	1	2.4	2.4	58.5
2500	1	2.4	2.4	61.0
25000	2	4.9	4.9	65.9
30,000	1	2.4	2.4	68.3
300000	1	2.4	2.4	70.7
400	1	2.4	2.4	73.2
5000	3	7.3	7.3	80.5
don't know - guess about \$1.0 M	1	2.4	2.4	82.9
Out side of these normal activities, the research budget includes \$6000-\$8000 annually for a research workshop/peer exchange activities	1	2.4	2.4	85.4
n/a	1	2.4	2.4	87.8
no special budget	1	2.4	2.4	90.2
unknown, difficult to capture costs	1	2.4	2.4	92.7
very little on research specifically	1	2.4	2.4	95.1
we currently don't capture these costs	1	2.4	2.4	97.6
we do not have a marketing program	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q32: Has your office developed a communications or marketing strategy/plan?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	11	26.8	26.8	26.8
2 no	30	73.2	73.2	100.0
Total	41	100.0	100.0	

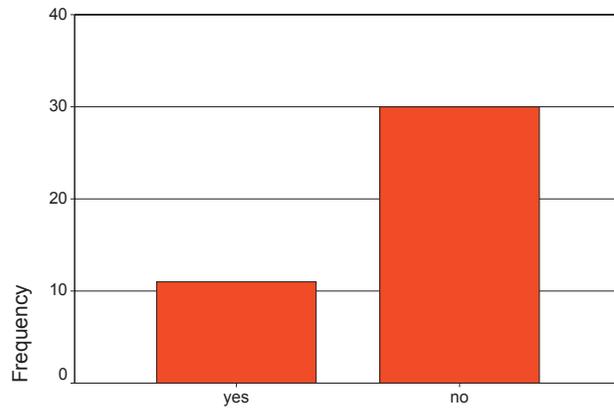
**Q32A If yes, How often is it updated?**

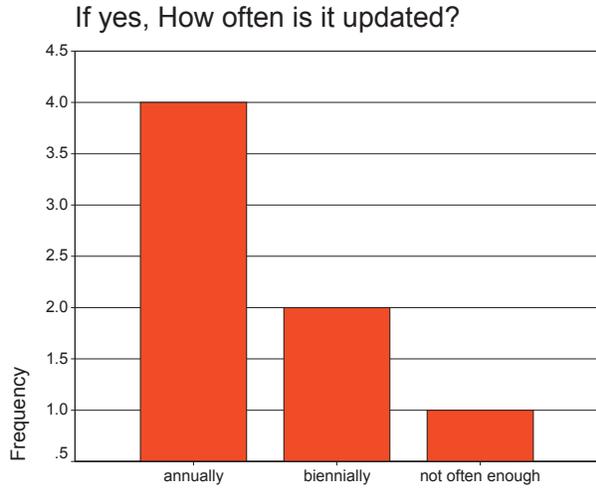
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34	82.9	82.9	82.9
annually	4	9.8	9.8	92.7
biannually	2	4.9	4.9	97.6
not often enough	1	2.4	2.4	100.0
Total	41	100.0	100.0	

**Q32B Who are the primary target audiences?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34	82.9	82.9	82.9
All audiences included	1	2.4	2.4	85.4
GDOT office heads or their reps & state universities	1	2.4	2.4	87.8
internal customers	1	2.4	2.4	90.2
internal management and practitioners/professionals	1	2.4	2.4	92.7
internal PENNDOT and other state DOT researchers	1	2.4	2.4	95.1
local and state government personnel	1	2.4	2.4	97.6
WisDOT	1	2.4	2.4	100.0
Total	41	100.0	100.0	

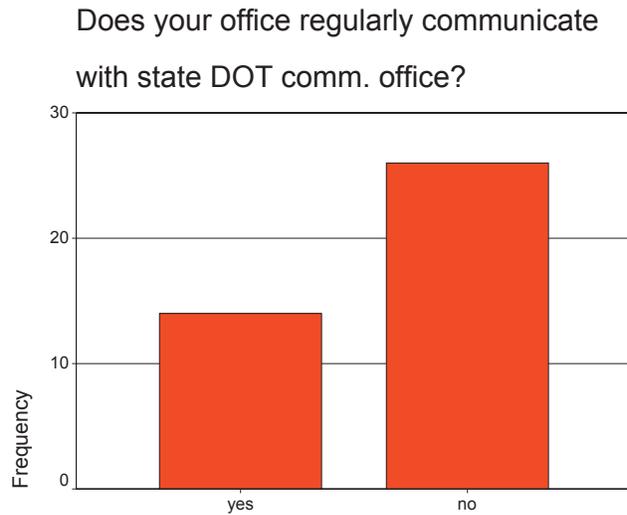
Has your office developed a communication  
or marketing strategy/plan?





**Q33: Does your research office regularly communicate with your state DOT's communication office to discuss your projects and activities?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	14	34.1	35.0	35.0
	2 no	26	63.4	65.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		



**Q34: Please indicate the ways in which your research program regularly elicits information from your constituents.**

**Q34A providing contact phone numbers in publications**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	32	78.0	78.0	78.0
	2 no	9	22.0	22.0	100.0
	Total	41	100.0	100.0	

**Q34B providing contact email addresses in publications**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	30	73.2	73.2	73.2
	2 no	11	26.8	26.8	100.0
	Total	41	100.0	100.0	

**Q34C providing contact phone numbers on websites**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	27	65.9	65.9	65.9
	2 no	14	34.1	34.1	100.0
	Total	41	100.0	100.0	

**Q34D providing contact email links on websites**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	25	61.0	61.0	61.0
	2 no	16	39.0	39.0	100.0
	Total	41	100.0	100.0	

**Q34E making phone calls**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	33	80.5	80.5	80.5
	2 no	8	19.5	19.5	100.0
	Total	41	100.0	100.0	

**Q34F sending emails**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	35	85.4	85.4	85.4
	2 no	6	14.6	14.6	100.0
	Total	41	100.0	100.0	

**Q34G conducting surveys**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	22	53.7	53.7	53.7
	2 no	19	46.3	46.3	100.0
	Total	41	100.0	100.0	

**Q34H using DOT's intranet**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	20	48.8	48.8	48.8
	2 no	21	51.2	51.2	100.0
	Total	41	100.0	100.0	

**Q34I attending professional meetings**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	32	78.0	78.0	78.0
	2 no	9	22.0	22.0	100.0
	Total	41	100.0	100.0	

**Q34J serving on professional committees**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	27	65.9	65.9	65.9
	2 no	14	34.1	34.1	100.0
	Total	41	100.0	100.0	

**Q34K hosting conferences or symposia**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	25	61.0	61.0	61.0
	2 no	16	39.0	39.0	100.0
	Total	41	100.0	100.0	

**Q34L holding regularly scheduled meetings**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	26	63.4	63.4	63.4
	2 no	15	36.6	36.6	100.0
	Total	41	100.0	100.0	

**Q34M attending other types of events**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	20	48.8	48.8	48.8
2 no	21	51.2	51.2	100.0
Total	41	100.0	100.0	

**Q34N other**

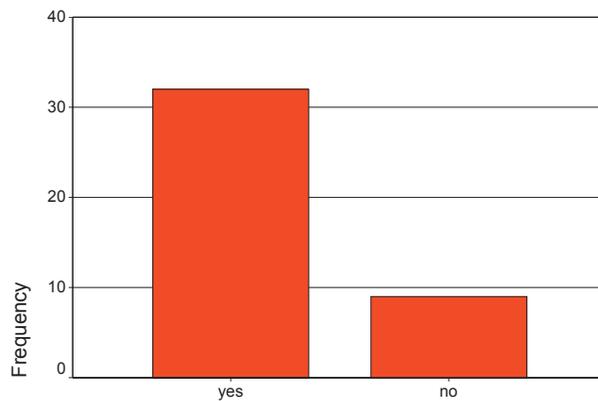
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	7	17.1	17.1	17.1
2 no	34	82.9	82.9	100.0
Total	41	100.0	100.0	

**Q34N1 specify**

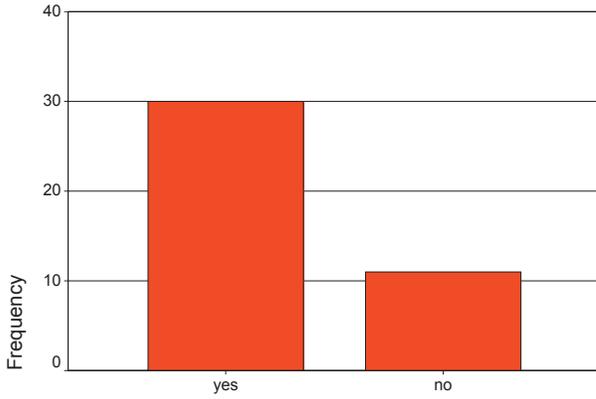
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34	82.9	82.9	82.9
annual solicitation of projects	1	2.4	2.4	85.4
comfortable	1	2.4	2.4	87.8
conducting focus groups	1	2.4	2.4	90.2
hosting training	1	2.4	2.4	92.7
promoting an "open-door" policy	1	2.4	2.4	95.1
solicit internet proposals through client office research coordinator	1	2.4	2.4	97.6
Total	41	100.0	100.0	100.0

providing contact phone numbers

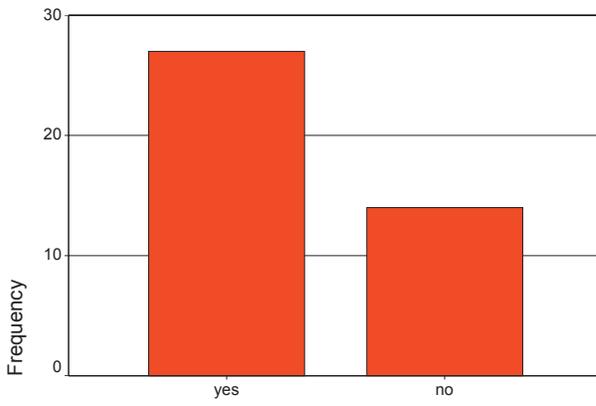
in publications



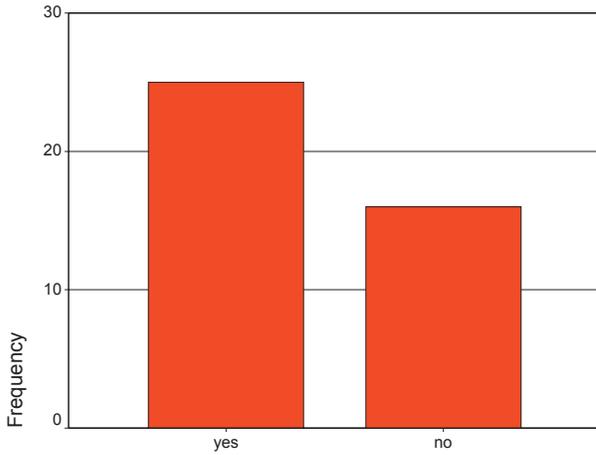
providing contact email addresses  
in publications

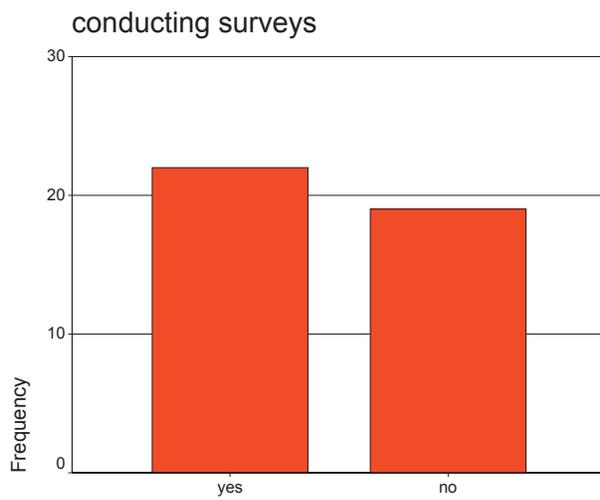
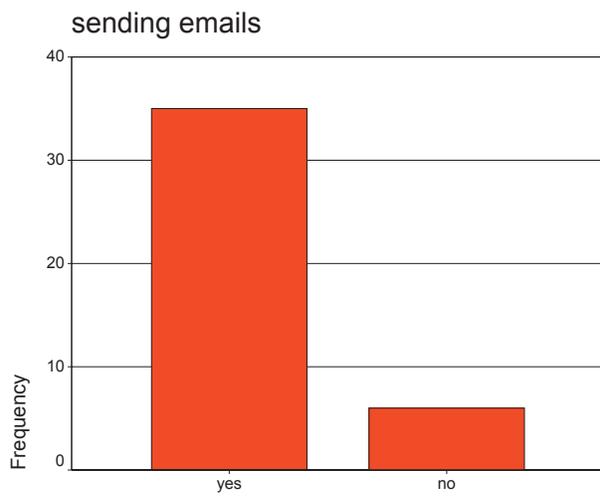
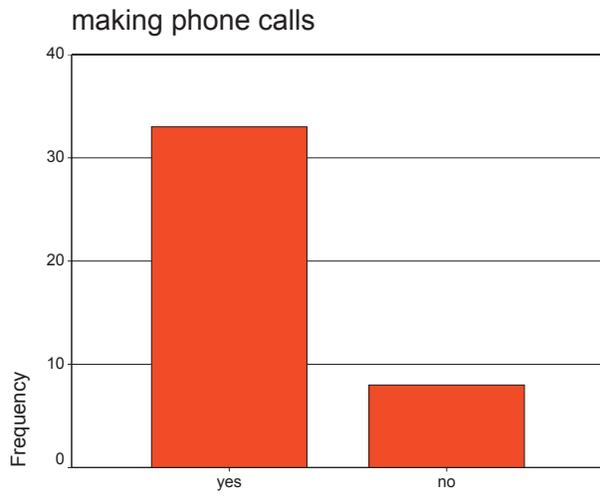


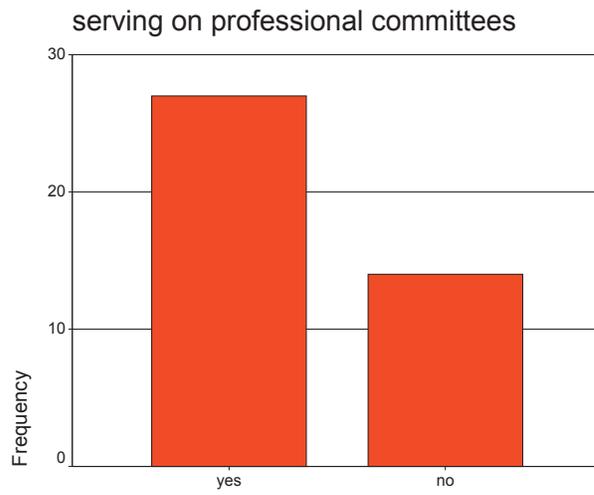
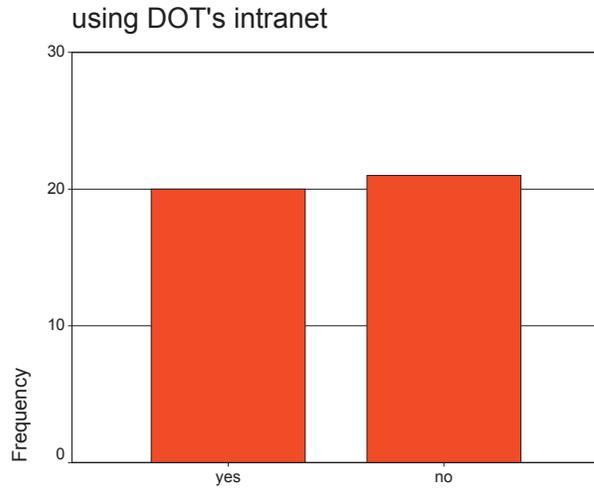
providing contact phone numbers  
on websites

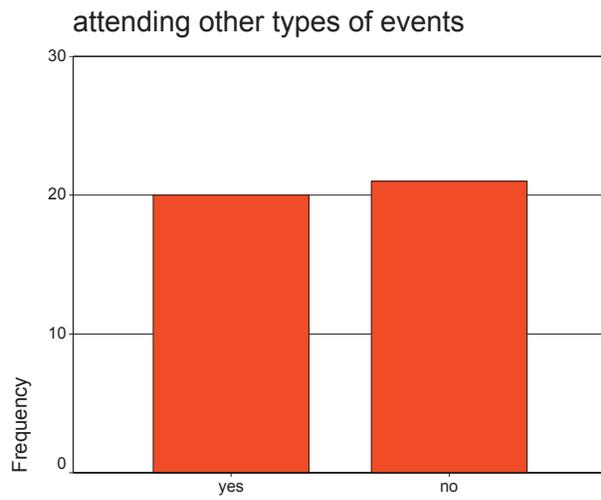
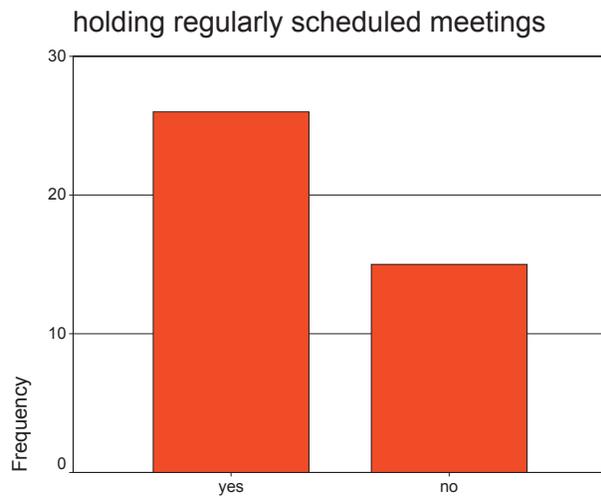
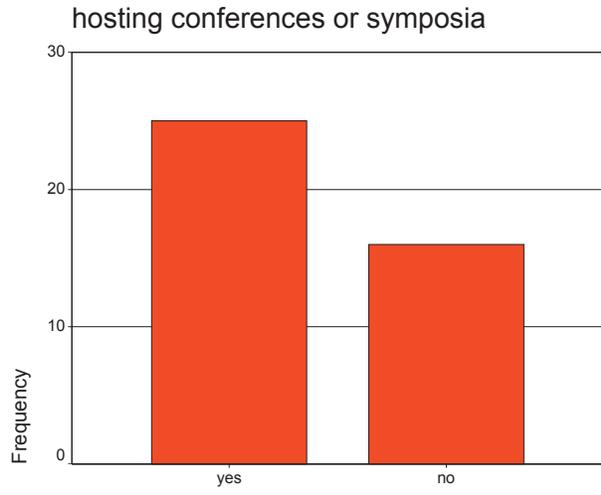


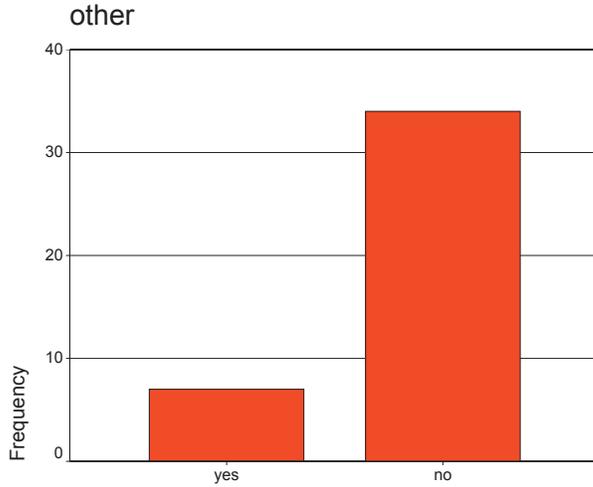
providing contact email links on websites











**Q35: In what ways do you learn about other state research office projects/activities?**

**Q35A office and/or DOT newsletters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	30	73.2	73.2	73.2
2 no	11	26.8	26.8	100.0
Total	41	100.0	100.0	

**Q35B TRIS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	37	90.2	90.2	90.2
2 no	4	9.8	9.8	100.0
Total	41	100.0	100.0	

**Q35C Research in progress database**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	36	87.8	87.8	87.8
2 no	5	12.2	12.2	100.0
Total	41	100.0	100.0	

**Q35D AASHTO research advisory committee**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	36	87.8	87.8	87.8
2 no	5	12.2	12.2	100.0
Total	41	100.0	100.0	

**Q35E peer exchange**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	28	68.3	68.3	68.3
	2 no	13	31.7	31.7	100.0
	Total	41	100.0	100.0	

**Q35F news releases**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	13	31.7	31.7	31.7
	2 no	28	68.3	68.3	100.0
	Total	41	100.0	100.0	

**Q35G brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	16	39.0	39.0	39.0
	2 no	25	61.0	61.0	100.0
	Total	41	100.0	100.0	

**Q35H tech briefs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	28	68.3	68.3	68.3
	2 no	13	31.7	31.7	100.0
	Total	41	100.0	100.0	

**Q35I feature articles**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	25	61.0	61.0	61.0
	2 no	16	39.0	39.0	100.0
	Total	41	100.0	100.0	

**Q35J research office web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	26	63.4	63.4	63.4
	2 no	15	36.6	36.6	100.0
	Total	41	100.0	100.0	

**Q35K chat room or electronic bulletin board**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	2.4	2.4	2.4
	2 no	40	97.6	97.6	100.0
	Total	41	100.0	100.0	

**Q35L listserv/electronic mail list**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	24	58.5	58.5	58.5
	2 no	17	41.5	41.5	100.0
	Total	41	100.0	100.0	

**Q35M letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	11	26.8	26.8	26.8
	2 no	30	73.2	73.2	100.0
	Total	41	100.0	100.0	

**Q35N speeches/presentations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	25	61.0	61.0	61.0
	2 no	16	39.0	39.0	100.0
	Total	41	100.0	100.0	

**Q35O telephone**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	20	48.8	48.8	48.8
	2 no	21	51.2	51.2	100.0
	Total	41	100.0	100.0	

**Q35P personal email**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	23	56.1	56.1	56.1
	2 no	18	43.9	43.9	100.0
	Total	41	100.0	100.0	

**Q35Q office visit**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	6	14.6	14.6	14.6
2 no	35	85.4	85.4	100.0
Total	41	100.0	100.0	

**Q35R conferences/meetings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	33	80.5	80.5	80.5
2 no	8	19.5	19.5	100.0
Total	41	100.0	100.0	

**Q35S annual reports**

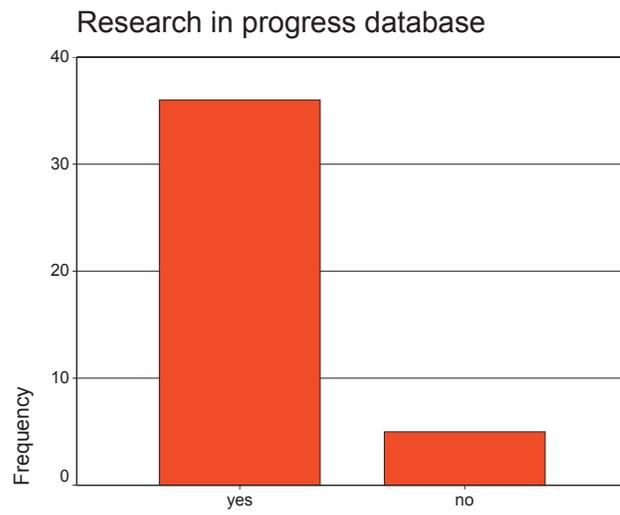
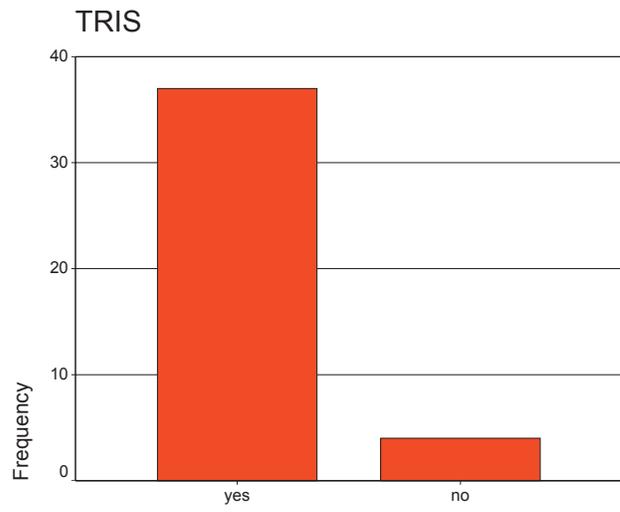
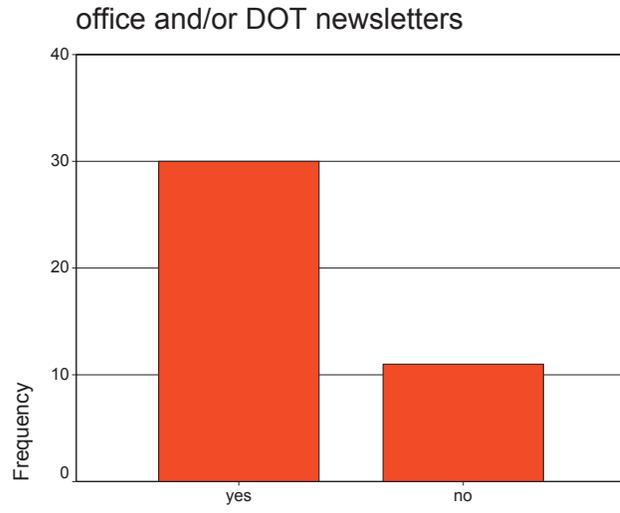
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	24	58.5	58.5	58.5
2 no	17	41.5	41.5	100.0
Total	41	100.0	100.0	

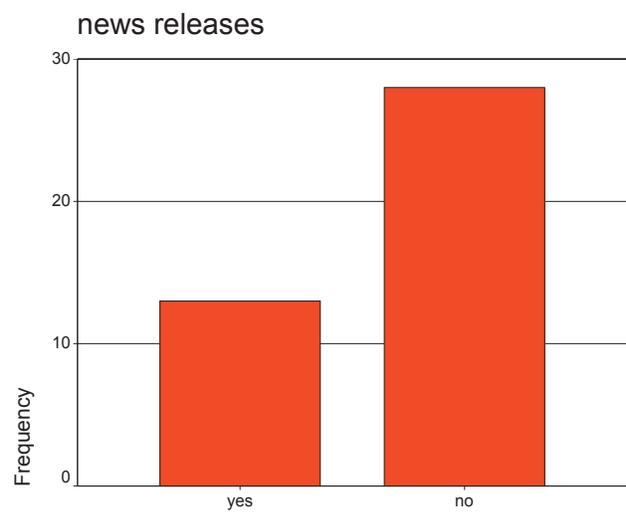
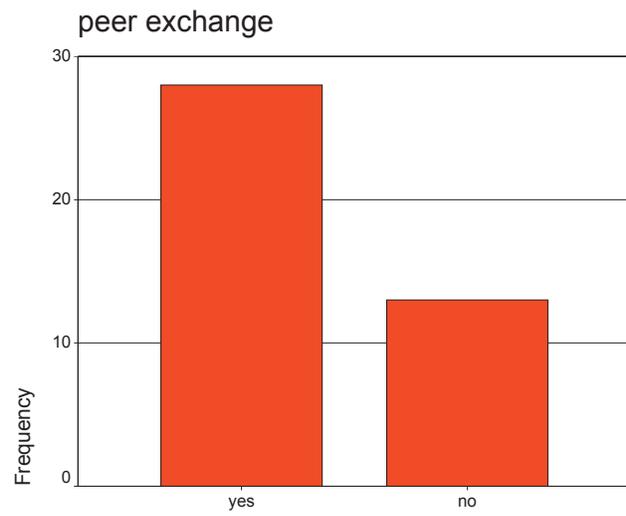
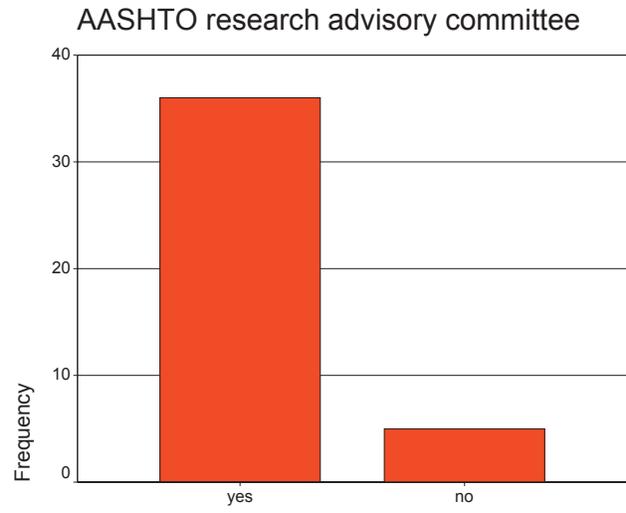
**Q35T other**

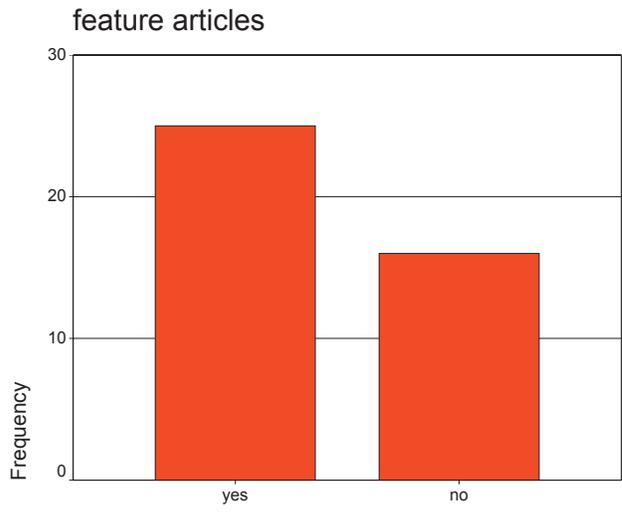
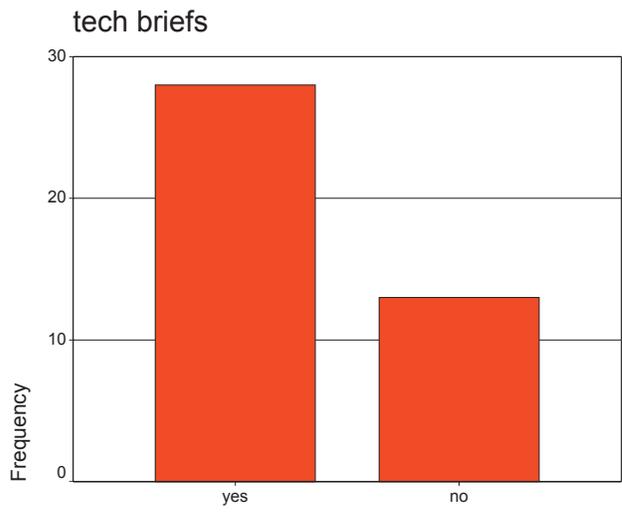
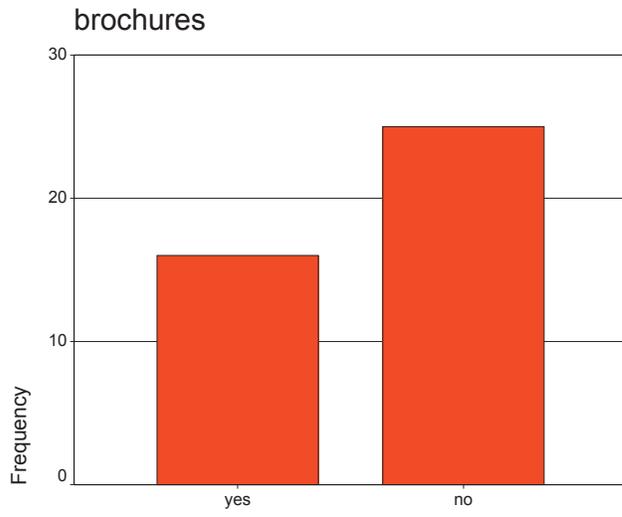
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	7	17.1	17.1	17.1
2 no	34	82.9	82.9	100.0
Total	41	100.0	100.0	

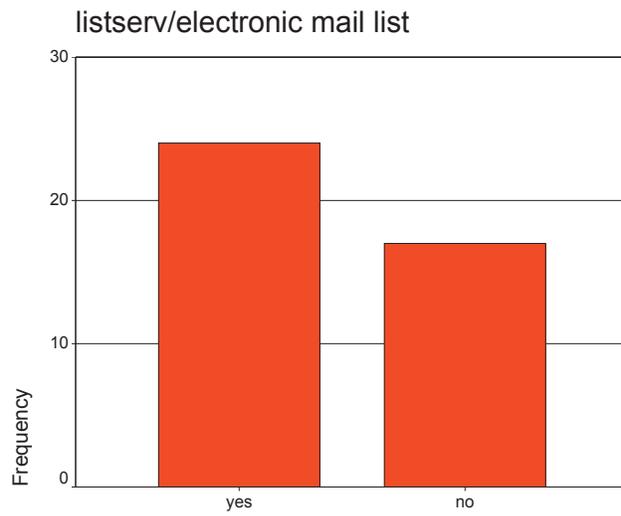
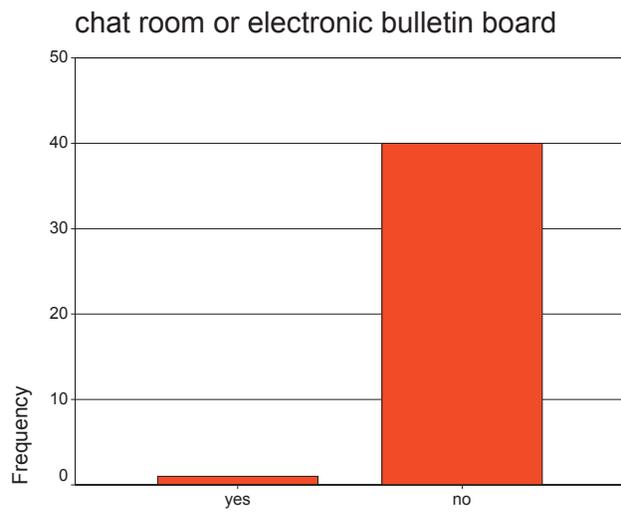
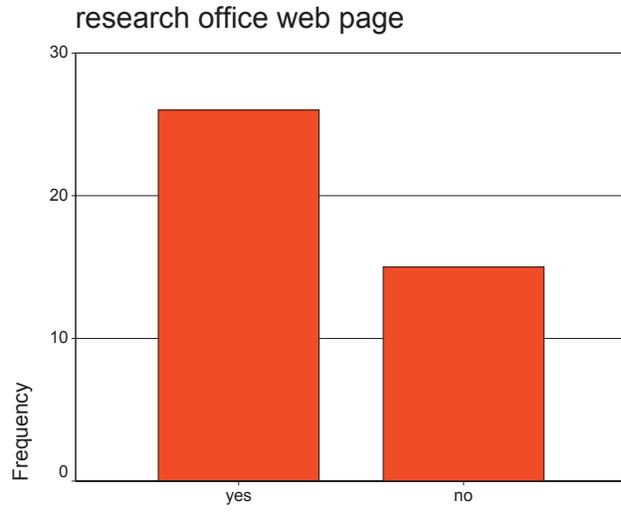
**Q35T1 please specify**

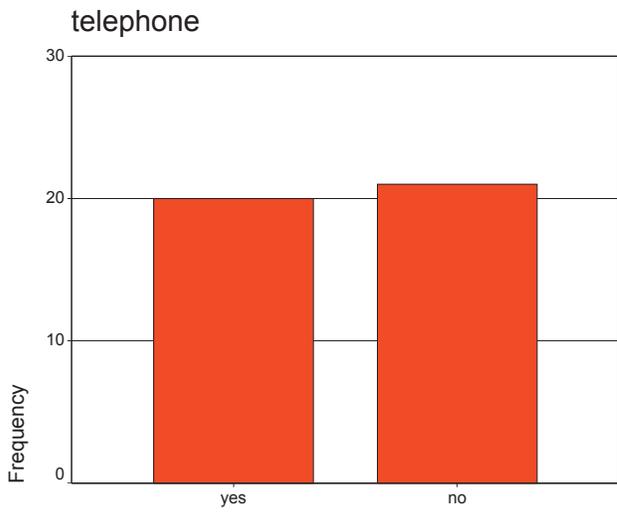
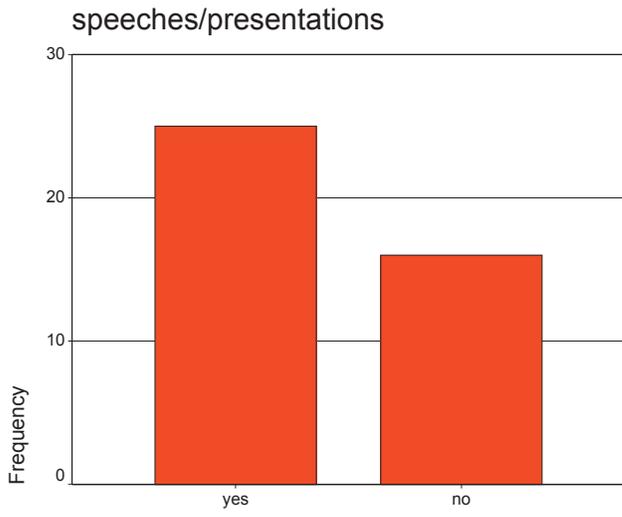
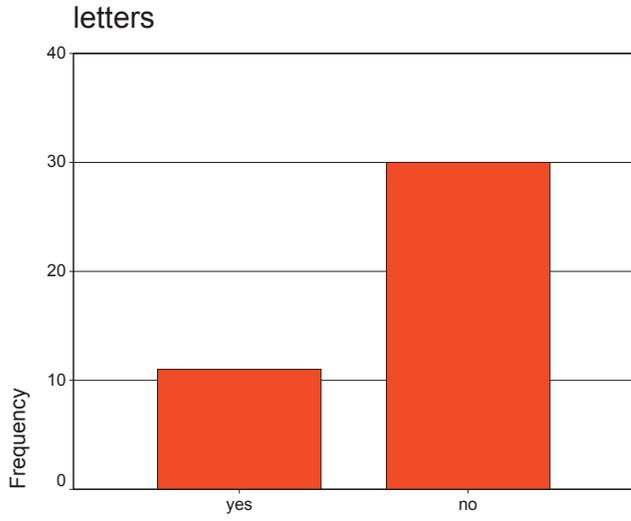
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34	82.9	82.9	82.9
AASHTO High Value Research Web Site and TIG publication	1	2.4	2.4	85.4
abstract delivered electronically	1	2.4	2.4	87.8
peer exchanges	1	2.4	2.4	90.2
pooled fund solicitations	1	2.4	2.4	92.7
research digest, T2 centers	1	2.4	2.4	95.1
telephone, email	1	2.4	2.4	97.6
mailouts	1	2.4	2.4	100.0
Total	41	100.0	100.0	

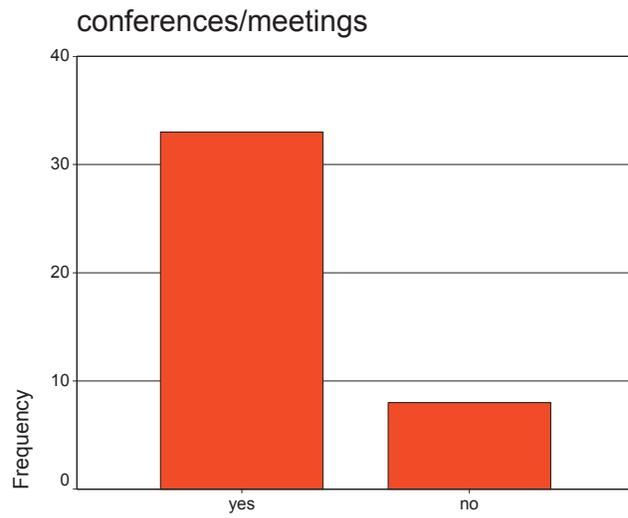
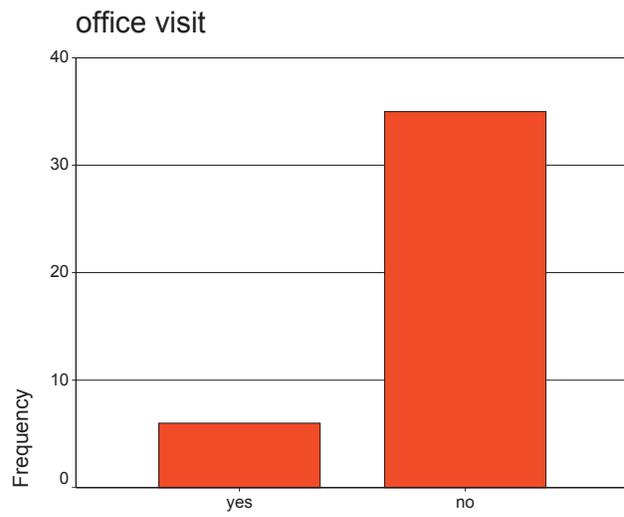
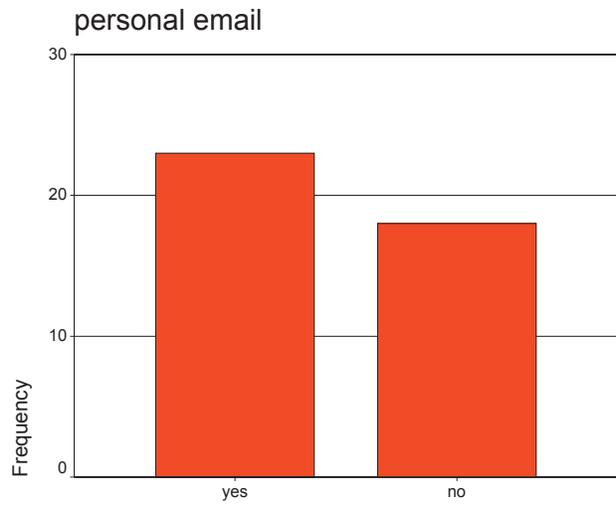


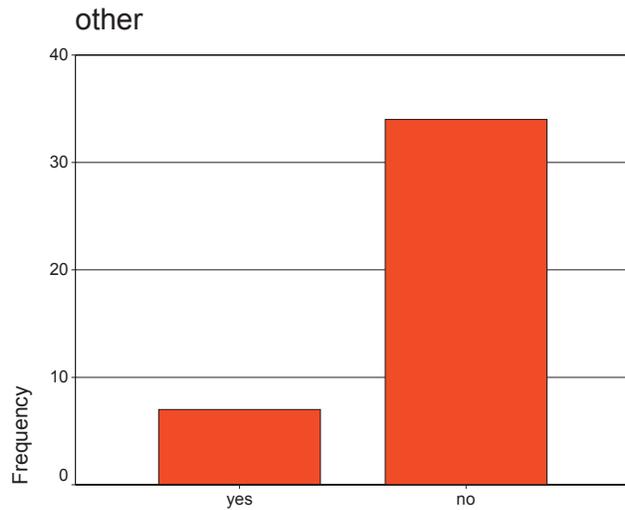
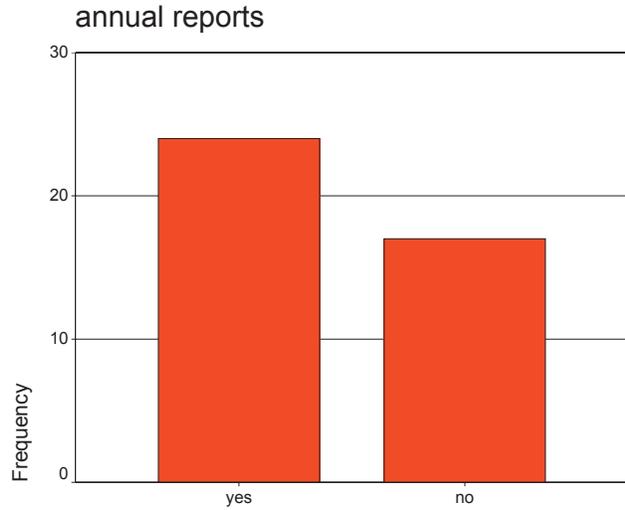








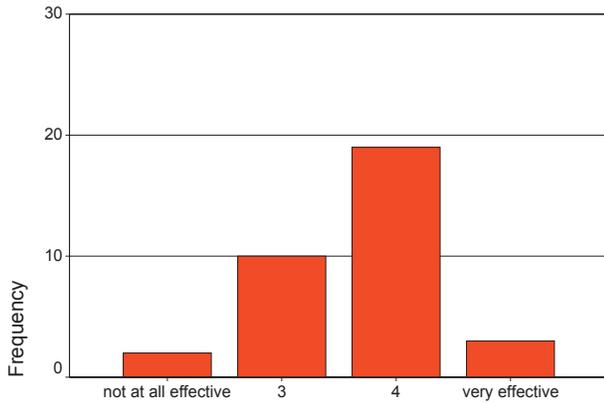




**Q36: Consider your responses to questions 32 and 33 above. On a scale of 1 to 5, with 1 being not at all effective and 5 being very effective, how effective do you believe these communication tools are at helping you solve your state's research problems?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 not at all effective	2	4.9	5.9	5.9
	3 3	10	24.4	29.4	35.3
	4 4	19	46.3	55.9	91.2
	5 very effective	3	7.3	8.8	100.0
	Total	34	82.9	100.0	
Missing	System	7	17.1		
Total		41	100.0		

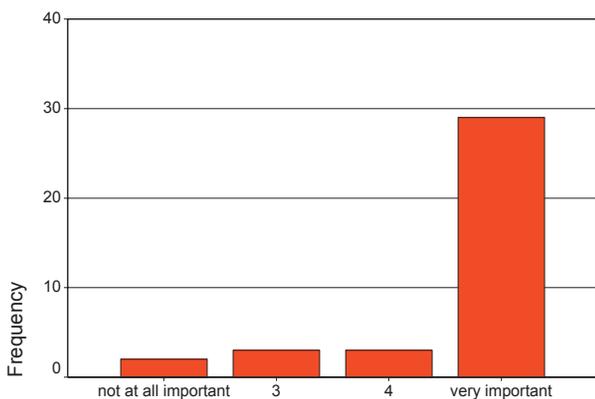
How effective do you believe these comm. tools are helping you solve problems?



**Q37: On a scale of 1 to 5, with 1 being not at all important and 5 being very important, how important do you believe it is for state research offices to actively share information with each other?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not at all important	2	4.9	5.4	5.4
	3 3	3	7.3	8.1	13.5
	4 4	3	7.3	8.1	21.6
	5 very important	29	70.7	78.4	100.0
	Total	37	90.2	100.0	
Missing	System	4	9.8		
Total		41	100.0		

How important do you believe it is for research offices to share info?



**Q38 What suggestions, if any, do you have to better obtain and share information among state research offices?\***

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21	51.2	51.2	51.2
all state DOT research offices should maintain online research library containing all their research reports in PDF format.	1	2.4	2.4	53.7
Create an Internet site through which all DOT's research activities can be accessible including information about research areas, ongoing studies and final reports.	1	2.4	2.4	56.1
Distribute research information, reports, etc. by electronic means (web site)	1	2.4	2.4	58.5
Distribution of project reports to transportation libraries. A RAC mailing list for publications.	1	2.4	2.4	61.0
First, states that do not complete their RIP entry need to start. There is no excuse for neglecting this duty. Second, states need to post research reports on the internet, as well as project summaries of research in progress.	1	2.4	2.4	63.4
Florida has a very useful program whereby they send emails with links to research reports and summary reports as soon as they are published	1	2.4	2.4	65.9
Greater use of internet including streaming media, listservs, videoconferencing, instant messaging, personal email, eNewsletters and use of TRIS and TRIS/RiP	1	2.4	2.4	68.3
Having the staff to get information into TRIS and RIPS.	1	2.4	2.4	70.7
More time allotted at TRB Annual Meetings and AASHTO RAC meetings for state DOT updates	1	2.4	2.4	73.2

**Q38 What suggestions, if any, do you have to better obtain and share information among state research offices?<sup>a</sup>**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
My suggestion is to make the information as simple and user friendly as possible. Organize your websites so that things are easy to find and can be downloaded quickly-no cutesy time-consuming graphics and animations; they just slow us down	1	2.4	2.4	75.6
Phone, email, conferences	1	2.4	2.4	78.0
Put emphasis on web page development and information.	1	2.4	2.4	80.5
RAC, share mgmt process, 1-pg. research distribution	1	2.4	2.4	82.9
regional meeting	1	2.4	2.4	85.4
regional research conference	1	2.4	2.4	87.8
Sending reports and research summaries is very good.	1	2.4	2.4	90.2
Set up a RAC bulletin board	1	2.4	2.4	92.7
The best model I have come across is the monthly Arizona Transportation Research Center Research Digest. Four levels of info(title, abstract, 2-pager, link to full document)	1	2.4	2.4	95.1
TRB should specify update interval for RIP and TRIS. Many of the active projects in RIP are no longer active upon enquiry into their status.	1	2.4	2.4	97.6
TRIS and RIP	1	2.4	2.4	100.0
Total	41	100.0	100.0	

a.

Note:Most common suggestions to better info-sharing:

electronical means 20%

RAC or TRIS 17%

meetings 7%



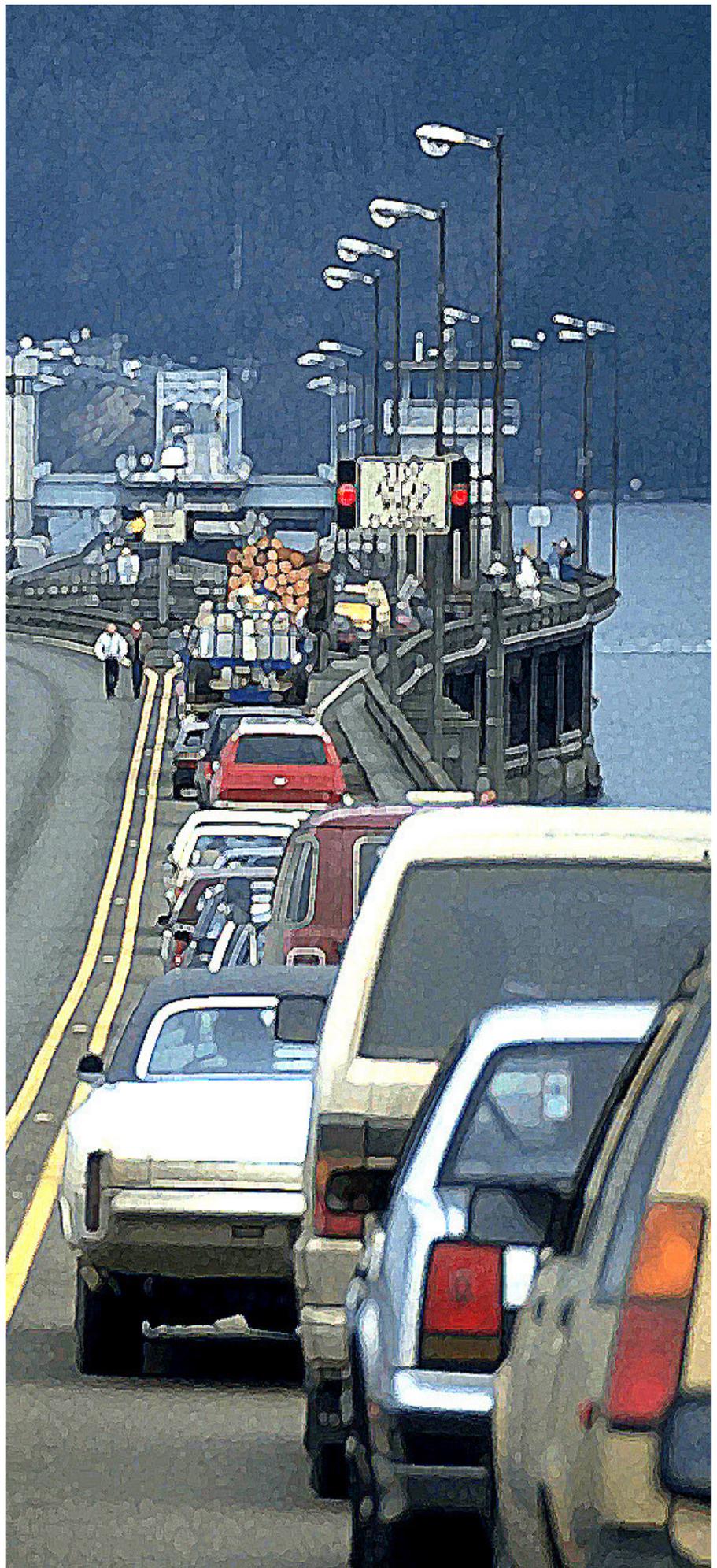
# Communication Strategies for State Transportation Research Programs

## **Volume IV of IV: Other External Constituent Surveys**

for the  
Ohio Department of Transportation  
Office of Research and Development  
and the  
Mid-Atlantic University  
Transportation Center

State Job Number: 14806(0)

**JUNE 2005**





## **Communication Strategies for State Transportation Research Programs**

### **Volume IV of IV: Other External ODOT Constituent Surveys**

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and the  
Mid-Atlantic University Transportation Center

State Job Number: 14806(0)

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15. Supplementary Notes		
16. Abstract <p>Transportation research is often "open ended" and difficult to measure, in that its beneficiaries may not know how they have been served by research activities and results. This research project sought to 1) obtain feedback from Ohio Department of Transportation (ODOT) constituents, 2) develop a strategic communication plan that supports ODOT's overall mission and goals, keeping in mind research office resources, and 3) develop a communication template that other DOTs could model or use. To accomplish these objectives, existing knowledge, attitudes, and behaviors regarding Ohio DOT's research office were obtained through a number of surveys. Those surveyed included the Ohio general public, internal DOT constituents (technical liaisons, administrators and directors, district deputy directors, district research contacts, FHWA regional center directors) and external DOT constituents (consultants, contractors, transportation committee legislators, and college civil engineering department heads). In addition, a nationwide survey of DOT research office directors was conducted to determine the constituents with whom their offices communicate and the means by which they do so.</p> <p>Common areas of interest among constituents were identified, from which key research office messages were proposed, so they might be included in research office correspondence and publicity. Constituents' preferred methods of obtaining research office information also was explored. The study found that most research office directors believe they communicate well internally but do not communicate effectively to external audiences. It was found that part of this problem could lie in the underutilization of communication office personnel, who have the training and contacts to spread the word about transportation research.</p>		
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## Chapter 1: Introduction/Method

### 1.1 Background

This project involved seven separate external ODOT constituent surveys, conducted between September 2002 and October 2003. External constituents consisted of the following groups:

- Ohio Residents
- Other state DOT Research Offices
- **Ohio College Civil Engineering Department Chairs**
- **Ohio Legislators serving on transportation-related committees**
- **FHWA Regional Resource Center Directors**
- **Ohio Contractors Association Officers**
- **Ohio County Engineers Association Officers**

All surveys were reviewed and pre-approved by the project's technical liaison, Monique Evans, and both project PIs. The large surveys (Ohio residents and other state DOT research offices) were also pre-tested, using a 10% random sample to identify possible problem questions and adjust them accordingly. Survey methods included random telephone, fax, and e-mail. At least two follow-up contacts were made for e-mailed and faxed surveys to try to increase response rates.

Survey response rates and survey dates are provided in the key summary findings pages for each survey. The key summary findings precede each survey instrument and detailed results for each question asked.

### 1.2 Ohio College Civil Engineering Department Chairs survey instrument

Dear Department Chair:

The Ohio Department of Transportation's Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation in this short survey is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or [knott@ohio.edu](mailto:knott@ohio.edu). Thank you for your participation.

1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in the activities of ODOT's research program?

1	2	3	4	5
not at all interested		neutral		very interested

1a. If you responded with a “4” or “5” to the question above, what is the motivation for your interest in ODOT’s research program? *(please select all that apply)*

- To extend my knowledge in my field
- To interact with researchers and engage in different activities
- To support graduate studies
- To support faculty research
- Part of my institutional mission
- Other *(please specify)* \_\_\_\_\_

1b. If you responded with a “4” or “5” to question 1, how has your interest in ODOT’s research program affected your department or institution?

2. Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT’s research program, according to their priority. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- To recruit new engineers from universities
- To support graduate studies and faculty research
- To build relationships with universities
- Other *(please specify)* \_\_\_\_\_

3. How do you learn of ODOT research program projects or activities? *(please note all that apply)*

- Transcript* newsletter
- Moving Forward* research newsletter
- Memos / Letters
- Personal e-mails or listservs
- Web page
- Conferences such as OTEC *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_
- Colleague *(please specify type)* \_\_\_\_\_
- Researchers *(please specify type)* \_\_\_\_\_
- Other *(please specify)* \_\_\_\_\_

4. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

- Yes
- No
- Sometimes
- Don’t Know / Not Applicable

5. What is your *preferred* source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?

*Transcript* newsletter  
 *Moving Forward* research newsletter  
 Memos / Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio)  
 Colleagues (*please specify*) \_\_\_\_\_  
 RFPs  
 Other (*please specify*) \_\_\_\_\_

6. Do you feel that you are part of the research program's strategic planning process?

Yes  
 No  
 Not Sure / Don't Know

7. What types of research activities are you most interested in knowing about? (*please check all that apply*)

Requests for Proposals  
 Ohio's success stories  
 Best practices (local, national, etc.)  
 Technical innovations  
 Technology transfer  
 Research management process  
 Strategic research plan  
 Training opportunities  
 Implementation

8. Does your department conduct research for other state DOTs?

Yes  
 No  
 Don't Know / Not Sure

8a. If you answered "yes" to the question above, please answer the following question: On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT's research program relative to other states?

1                      2                      3                      4                      5  
 low quality                      average quality                      high quality

8b. If you answered "yes" to question 8, please answer the following question: On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program relative to other state DOT programs?

1                      2                      3                      4                      5  
 not effective                      neutral                      very effective

9. Does your department conduct research for other state or federal government agencies (e.g., NSF)?
- Yes  
 No  
 Don't Know / Not Sure

9a. If you answered “yes” to the question above, please answer the following question: On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT’s research program relative to other government agencies?

1                      2                      3                      4                      5  
low quality                      average quality                      high quality

9b. If you answered “yes” to question 9, please answer the following question: On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT’s communication about its research program relative to other government agencies?

1                      2                      3                      4                      5  
not effective                      neutral                      very effective

10. Finally, please take a moment to consider—and then list—any other of your associates or constituents who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses via e-mail (knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via post to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

### 1.3 Ohio Legislators (on transportation-related committees) survey instrument

Dear Transportation Committee Member:

The Ohio Department of Transportation’s Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. Your views are very important to us, and your responses will be kept anonymous. Please note that your participation in this short survey is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or knott@ohio.edu.

1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you of ODOT research program activities?

1                      2                      3                      4                      5  
not at all interested                      neutral                      very interested

1a. If you responded with a “4” or “5” to the question above, what is the motivation for your interest in ODOT’s research program? *(please select all that apply)*

- Part of my legislative responsibilities
- To extend my knowledge of the transportation field
- To interact with researchers
- To provide solutions to technical problems relating to my constituents
- Other *(please specify)* \_\_\_\_\_

2. Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT’s research program according to their priority. *(please rate)*  
0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other *(please specify)* \_\_\_\_\_

3. How do you learn of ODOT research program projects or activities? (please note all that apply)

- Transcript* newsletter
- Moving Forward* research newsletter
- DOT Secretary
- Memoranda / Letters
- Personal e-mails or listservs
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_
- Colleague *(please specify type)* \_\_\_\_\_
- Researchers *(please specify type)* \_\_\_\_\_
- Other *(please specify)* \_\_\_\_\_

4. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

- Yes
- No
- Sometimes
- Don’t Know / Not Applicable

5. Are you aware of any research program activities that resulted in the following? (*please check all that apply*)

Personnel cost savings (*please specify*) \_\_\_\_\_  
 Other cost savings (*please specify*) \_\_\_\_\_  
 Safety improvements (*please specify*) \_\_\_\_\_  
 Quality improvements (*please specify*) \_\_\_\_\_  
 Better materials (*please specify*) \_\_\_\_\_  
 Better methods (*please specify*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_

6. Have you heard of any of the following specific research projects? If so, please place a check next to those project titles.

SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

- 6a. If so, how did you hear of them? (please note all that apply)

*Transcript* newsletter  
 *Moving Forward* research newsletter  
 DOT Secretary  
 Memoranda / Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio)  
 Colleague  
 Other (*please specify*) \_\_\_\_\_

7. What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?

*Transcript* newsletter  
 *Moving Forward* research newsletter  
 IOCs / Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio)  
 Colleagues  
 Other (*please specify*) \_\_\_\_\_

8. Do you feel that your specific interests are addressed by the research program?
- Yes  
 No  
 Not Sure / Don't Know
9. What types of research activities are you most interested in knowing about? *(please check all that apply)*
- ODOT's success stories  
 Best practices (local, national, etc.)  
 Technical innovations  
 Technology transfer  
 Research management process  
 Strategic research plan  
 Implementation  
 Cost-saving measures  
 Benchmarking with other states
10. Finally, please take a moment to consider—and then list—any other of your associates or constituents who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses via e-mail to [knott@ohio.edu](mailto:knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

#### 1.4 FHWA Regional Resource Center Directors survey instrument

Dear FHWA Colleague:

The Ohio Department of Transportation's Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation in this short survey is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or [knott@ohio.edu](mailto:knott@ohio.edu). Please return your responses by fax to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in ODOT's research program activities?

1	2	3	4	5
not at all interested		neutral		very interested

1a. If you responded with a “4” or “5” to the question above, what is the motivation for your interest in ODOT’s research program? *(please select all that apply)*

- Part of my job description
- To extend my knowledge of the transportation field
- To interact with researchers and engage in different activities
- To provide solutions to technical problems relating to my work
- Other *(please specify)* \_\_\_\_\_

1b. If you responded with a “4” or “5” to question 1, how has your interest in ODOT’s research program improved the efficiency or effectiveness of your job or program?

2. Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT’s research program according to priority. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other *(please specify)* \_\_\_\_\_

3. On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT’s research program relative to other states in your region?

1	2	3	4	5
low quality		average quality		high quality

4. How do you learn of ODOT research program projects or activities? *(please note all that apply)*

- Transcript* newsletter
- Moving Forward* research newsletter
- DOT Secretary
- Memoranda / Letters
- Personal e-mails or listservs
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_
- Colleague *(please specify type)* \_\_\_\_\_
- Researchers *(please specify type)* \_\_\_\_\_
- Other *(please specify)* \_\_\_\_\_

5. On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program relative to other state programs in your region?

1                      2                      3                      4                      5  
 not effective                      neutral                      very effective

6. Do you find ODOT's Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

Yes  
 No  
 Sometimes  
 Don't Know / Not Applicable

7. Are you aware of any research program activities that resulted in the following? (*please check all that apply*)

Personnel cost savings (*please specify*) \_\_\_\_\_  
 Other cost savings (*please specify*) \_\_\_\_\_  
 Safety improvements (*please specify*) \_\_\_\_\_  
 Quality improvements (*please specify*) \_\_\_\_\_  
 Better materials (*please specify*) \_\_\_\_\_  
 Better methods (*please specify*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_

8. Have you heard of any of the following specific research projects? If so, please place a check next to those project titles.

SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

- 8a. If so, how did you hear of them? (please note all that apply)

*Transcript* newsletter  
 *Moving Forward* research newsletter  
 DOT Secretary  
 Memoranda / Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio)  
 Colleague  
 Other (*please specify*) \_\_\_\_\_

9. What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?
- Transcript* newsletter
  - Moving Forward* research newsletter
  - IOCs / Letters
  - Personal e-mail or listserv
  - Web page
  - Conferences (*please specify*) \_\_\_\_\_
  - Brochures
  - Media (newspaper, TV, radio)
  - Colleagues
  - Other (*please specify*) \_\_\_\_\_
10. Do you feel that you are part of the ODOT research program's strategic planning process?
- Yes
  - No
  - Not Sure / Don't Know
11. What types of research activities are you most interested in knowing about? (*please check all that apply*)
- Requests for Proposals
  - Ohio's success stories
  - Best practices (local, national, etc.)
  - Technical innovations
  - Technology transfer
  - Research management process
  - Strategic research plan
  - Training opportunities
  - Implementation
  - Cost-saving measures
  - Benchmarking with other states
12. Finally, please take a moment to consider—and then list—any other of your associates or constituents who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses by fax to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

### 1.5 Ohio Contractors Association Officers survey instrument

Dear Contractors Association Officers and Directors:

The Ohio Department of Transportation's Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. Your views are very important to us, and your responses will be kept anonymous. Please note that your participation in this short survey is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Thank you for your participation. Please either hit "reply" to return your responses via e-mail to knott@ohio.edu, fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701. The survey appears both below and as a Microsoft Word attachment, for your convenience.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or knott@ohio.edu.

1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in the activities of ODOT's research program?

1	2	3	4	5
not at all interested		neutral		very interested

1a. If you responded with a "4" or "5" to the question above, what is the motivation for your interest in ODOT's research program? (please select all that apply)

- To seek ways to reduce the costs of highway construction
- To seek ways to increase quality control of highway construction
- To seek ways to increase construction safety
- To serve as a source of innovation
- It's part of my job description
- To extend my knowledge in my field
- To interact with researchers
- Other (*please specify*) \_\_\_\_\_

1b. If you responded with a "4" or "5" to the question above, how has your interest in ODOT's research program improved the efficiency or effectiveness of your job or program?

2. Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT's research program according to their priority. (please rate)

- 0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority
- To solve problems for constituents/trouble-shooting
  - To attain national recognition for Ohio and ODOT
  - To serve as a technical resource
  - To seek out or propose ways to improve ODOT activities
  - To compile best practices from peers and other organizations and share them with ODOT personnel
  - Other (*please specify*) \_\_\_\_\_

3. What role do you believe the Contractors Association can best play in collaboration with ODOT's Research Office?
- Generating project needs/ideas  
 Reviewing proposals  
 Monitoring projects  
 Advisory board/strategic planning  
 Other (*please specify*) \_\_\_\_\_
4. How do you learn of ODOT research program projects or activities? (*please note all that apply*)
- Transcript* newsletter  
 *Moving Forward* research newsletter  
 Letters  
 Personal e-mails or listservs  
 Web page  
 Conferences such as OTEC (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio) (*please specify*) \_\_\_\_\_  
 Colleague (*please specify type*) \_\_\_\_\_  
 Researchers (*please specify type*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_
5. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?
- Yes  
 No  
 Sometimes  
 Don't Know / Not Applicable
6. Are you aware of any research program activities that resulted in the following? (*please check all that apply*)
- Personnel cost savings (*please specify*) \_\_\_\_\_  
 Other cost savings (*please specify*) \_\_\_\_\_  
 Safety improvements (*please specify*) \_\_\_\_\_  
 Quality improvements (*please specify*) \_\_\_\_\_  
 Better materials (*please specify*) \_\_\_\_\_  
 Better methods (*please specify*) \_\_\_\_\_  
 Other (*please specify*) \_\_\_\_\_
7. Have you heard of any of the following specific research projects? If so, please place a check next to those project titles.
- SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

7a. If so, how did you hear of them? *(please note all that apply)*

- Transcript newsletter
- Moving Forward research newsletter
- Letters
- Personal e-mail or listserv
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleague
- Other *(please specify)* \_\_\_\_\_

8. What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?

- Transcript newsletter
- Moving Forward research newsletter
- Letters
- Personal e-mail or listserv
- Web page
- Conferences *(please specify)* \_\_\_\_\_
- Brochures
- Media (newspaper, TV, radio)
- Colleagues
- Other *(please specify)* \_\_\_\_\_

9. Do you feel that you are part of the research program's strategic planning process?

- Yes
- No
- Not Sure / Don't Know

10. What types of research activities are you most interested in knowing about? *(please check all that apply)*

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation

Finally, please take a moment to consider—and then list—any other of your associates or constituents who might take an interest in or value the products of the research program.

Thank you for your participation. Please either hit “reply” to return your responses via e-mail to knott@ohio.edu, fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

## 1.6 Ohio County Engineers Association Officers survey instrument

Dear County Engineer:

The Ohio Department of Transportation's Office of Research and Development seeks your input as part of a larger communication study being conducted by researchers at Ohio University and the Mid-Atlantic Universities Transportation Center at West Virginia University. *Your views are very important to us, and your responses will be kept anonymous.* Please note that your participation in this short survey is voluntary, and completion and return of this survey implies you are at least 18 years of age and consent to the use of this data for research purposes.

Should you have questions regarding this project, please contact Diana Knott, Ph.D., at 740-597-1294 or knott@ohio.edu. Please return your responses via e-mail by hitting the reply button or send them via fax to Dr. Knott at 740-593-2592 or by post to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in ODOT's research program activities?

1	2	3	4	5
not at all interested		neutral		very interested

1a. If you responded with a "4" or "5" to the question above, what is the motivation for your interest in ODOT's research program? *(please select all that apply)*

- Part of my job description
- To extend my knowledge of the transportation field
- To interact with researchers and engage in different activities
- To provide solutions to technical problems relating to my work
- Other *(please specify)* \_\_\_\_\_

1b. If you responded with a "4" or "5" to question 1, how has your interest in ODOT's research program improved the efficiency or effectiveness of your job or program?

2. Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT's research program according to priority. *(please rate)*

0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority

- To solve problems for constituents
- To attain national recognition for Ohio and ODOT
- To serve as a technical resource
- To seek out or propose ways to improve ODOT activities
- To compile best practices from peers and other organizations and share them with ODOT personnel
- Other *(please specify)* \_\_\_\_\_

3. On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT's research program?

1                      2                      3                      4                      5  
 low quality                      average quality                      high quality

4. How do you learn of ODOT research program projects or activities? *(please note all that apply)*

*Transcript* newsletter  
 *Moving Forward* research newsletter  
 DOT Secretary  
 Memoranda / Letters  
 Personal e-mails or listservs  
 Web page  
 Conferences *(please specify)* \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio) *(please specify)* \_\_\_\_\_  
 Colleague *(please specify type)* \_\_\_\_\_  
 Researchers *(please specify type)* \_\_\_\_\_  
 Other *(please specify)* \_\_\_\_\_

5. On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program to county engineers?

1                      2                      3                      4                      5  
 not effective                      neutral                      very effective

6. Do you find ODOT's Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?

Yes  
 No  
 Sometimes  
 Don't Know / Not Applicable

7. Are you aware of any research program activities that resulted in the following? *(please check all that apply)*

Personnel cost savings *(please specify)* \_\_\_\_\_  
 Other cost savings *(please specify)* \_\_\_\_\_  
 Safety improvements *(please specify)* \_\_\_\_\_  
 Quality improvements *(please specify)* \_\_\_\_\_  
 Better materials *(please specify)* \_\_\_\_\_  
 Better methods *(please specify)* \_\_\_\_\_  
 Other *(please specify)* \_\_\_\_\_

8. Have you heard of any of the following specific research projects? If so, please place a check next to those project titles.

- SHRP Pavement Project on Delaware 23  
 Ohio Freight Study  
 Evaluation of Warranty Provisions on ODOT Construction Projects  
 Evaluation of Drainable Bases Under Asphalt Pavement  
 Development of Crash Reduction Techniques  
 Innovative Bridge Design Construction Techniques to Expedite Construction  
 Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

- 8a. If so, how did you hear of them? (please note all that apply)

- Transcript* newsletter  
 *Moving Forward* research newsletter  
 DOT Secretary  
 Memoranda / Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio) \_\_\_\_\_  
 Colleague  
 Other (*please specify*) \_\_\_\_\_

9. What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?

- Transcript* newsletter  
 *Moving Forward* research newsletter  
 Letters  
 Personal e-mail or listserv  
 Web page  
 Conferences (*please specify*) \_\_\_\_\_  
 Brochures  
 Media (newspaper, TV, radio) \_\_\_\_\_  
 Colleagues  
 Other (*please specify*) \_\_\_\_\_

10. Do you feel that you are part of the ODOT research program's strategic planning process?

- Yes  
 No  
 Not Sure / Don't Know

11. What types of research activities are you most interested in knowing about? (*please check all that apply*)

- Requests for Proposals
- Ohio's success stories
- Best practices (local, national, etc.)
- Technical innovations
- Technology transfer
- Research management process
- Strategic research plan
- Training opportunities
- Implementation
- Cost-saving measures
- Benchmarking with other states

12. Finally, please take a moment to consider—and then list—any other of your associates or constituents who might take an interest in or value the products of the research program.

Thank you for your participation. Please return your responses via e-mail (knott@ohio.edu), fax them to Dr. Knott at 740-593-2592, or return them via postal mail to Diana Knott, 102 Scripps Hall, Athens, OH 45701.

## Chapter 2:

### Key Survey Findings

#### 2.1 Ohio College Civil Engineering Department Chairs key findings

N = 6 / 18 = 33% response

Survey conducted October 2003

#### *Key Summary Findings (complete survey results appear in Appendix A)*

50% report they are very interested in ODOT's research program activities

Reasons why:

- 67% report they want to extend their knowledge of the field
- 50% report it is part of their institution's mission
- 33% report they want to interact with researchers
- 33% report they want to support graduate studies
- 33% they want to support faculty research

Regarding priorities of the research office:

- 100% report solving problems for constituents at least somewhat of a priority
- 100% report serving as a technical resource at least somewhat of a priority
- 100% report seeking out ways to improve ODOT activities at least somewhat of a priority
- 100% report to compile best practices at least somewhat of a priority
- 83% to recruit new engineers from universities
- 83% to build relationships with universities

How they learn of ODOT research program activities:

- 50% through Web page
- 50% through conferences (OTEC, County Engineers Assn.)
- 33% through e-mails or listservs

33% report they find the Research Office accessible; 50% report it's not applicable

Preferred source of receiving info about research program:

- 67% report e-mail / listserv
- No other medium had more than one respondent

Types of research activities most interested in knowing about:

- 67% report Requests for Proposals
- 67% report best practices
- 67% report technical innovations
- 67% report technology transfer
- 67% report training opportunities

33% responded they conduct research for other state DOTs

Of those who do, 17% rate ODOT's research program as a good quality program; the other 50% rate it as average quality.

83% responded they conduct research for other state or federal government agencies  
Of those who do, 67% rate ODOT's research program as average quality or above.

## 2.2 Ohio Legislators (on transportation-related committees) key findings

N = 3 / 24 = 12.5% response

Survey conducted July 2003

### *Key Summary Findings (complete survey results appear in Appendix B)*

67% report they are somewhat interested in ODOT's research program activities

67% report it is part of their legislative responsibilities to be informed

Regarding priorities of the research office:

- 100% report seeking ways to improve ODOT activities at least somewhat of a priority
- 100% report compiling best practices from peers and others at least somewhat of a priority
- 67% report solving problems for ODOT constituents is at least somewhat of a priority for the research office
- 67% report serving as technical resource at least somewhat of a priority

How they learn of ODOT research program activities:

- 33% through DOT secretary
- 33% through media
- 33% through colleagues
- 33% through legislative hearings
- No other communication mechanisms used

Regarding research outcomes they've heard of:

- 33% report personnel cost savings
- 33% report other cost savings
- 33% report safety improvements
- Aware of no other outcomes

Regarding research projects they're aware of:

- 33% had heard of Ohio Freight Study
- 33% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 33% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 33% had heard of Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements

How did you hear of these activities/projects?

- The only ones listed were the following:
- 33% said media
- 33% said legislative hearings

Preferred source of receiving info about research program:

- 67% report e-mail
- 67% report colleague
- 33% report letters
- 33% report Web page
- 33% report media

67% feel their specific interests are addressed by the research program; 33% not sure

Types of research activities most interested in knowing about:

- 100% report best practices
- 67% report ODOT's success stories
- 67% report technical innovations
- 67% report cost-savings measures
- 33% report technology transfer
- 33% report implementation

Others who may be interested in or value products of research program:

- County commissioners
- Mayors

### 2.3 FHWA Regional Resource Center Directors key findings

N = 3 / 4 = 75% response

Survey conducted August 2003

#### *Key Summary Findings (complete survey results appear in Appendix C)*

100% report they are at least somewhat interested in ODOT's research program activities

Reasons why:

- 67% report they want to extend their knowledge of the transportation field
- 67% report they want to provide solutions to technical problems related to their work
- 33% report it is part of their job description to be informed
- 33% report they want to provide info and technical expertise

Interest in ODOT's research program has improved their efficiency and effectiveness in their own positions by:

- assisting in the delivery of technology and innovations
- transferable research results (ODOT is typical of Midwest highway transportation programs)

Regarding priorities of the research office:

- 100% report serving as a technical resource at least somewhat of a priority
- 67% report solving problems for ODOT constituents is at least somewhat of a priority
- 67% report to compile best practices at least somewhat of a priority
- 33% report attaining national recognition is somewhat of a priority
- 33% report seeking out ways to improve ODOT activities a high priority
- 33% report sharing research results with other state DOTs is a high priority

67% report that ODOT's research program rates a 4 out of 5, with 5 representing a high quality research program relevant to other states in the region

How they learn of ODOT research program activities:

- 67% through letters
- 67% through Web page
- 33% through conferences (OTEC)
- 33% through colleagues

Regarding research outcomes they've heard of:

- 33% report quality improvements (Delaware, OH, project)
- Aware of no other outcomes

Regarding research projects they're aware of:

- 67% heard of SHRP Pavement Project on Delaware 23
- 67% had heard of Innovative Bridge Design Construction Techniques to Expedite Construction
- 33% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 33% had heard of Crash Reduction Techniques

How did you hear of these activities/projects?

- The only ones listed were the following:
- 33% said conferences (SHRP)
- 33% said colleagues

Preferred source of receiving info about research program:

- 33% report *Transcript*
- 67% report *Moving Forward*
- 67% report Web page
- 33% report conferences (OTEC)
- 33% report brochures

33% feel they are part of the research office's strategic planning process

Types of research activities most interested in knowing about:

- 100% report best practices
- 100% report technical innovations
- 67% report ODOT's success stories
- 67% report cost-savings measures
- 33% report technology transfer
- 33% report training opportunities
- 33% report benchmarking with other states

#### 2.4 Ohio Contractors Association Officers key findings

N = 8 / 23 = 35% response

Survey conducted October 2003

***Key Summary Findings (complete survey results appear in Appendix D)***

62% report they are at least somewhat interested in ODOT's research program activities

Reasons why:

- 62% report they want to seek ways to increase construction safety
- 50% report they want to seek ways to reduce the costs of highway construction
- 37% report they want to extend their knowledge of the field
- 25% report they want to seek ways to increase quality control of highway construction

Regarding priorities of the research office:

- 100% report seeking out ways to improve ODOT activities at least a high priority
- 100% report to compile best practices at least somewhat of a priority
- 87% report serving as a technical resource at least somewhat of a priority
- 100% report solving problems for constituents at least somewhat of a priority

75% report Contractors Assn. could generate project ideas in collaboration with ODOT's research office  
 62% report Contractors Assn. could serve on an advisory board and/or in strategic planning capacity with ODOT's research office

75% report Contractors Assn. could help monitor projects in collaboration with ODOT's research office

How they learn of ODOT research program activities:

- 50% through Transcript
- 37% through conferences (OTEC)
- 25% through Web page
- 25% through media (newspaper)

Regarding research outcomes they've heard of:

- 25% aware of better materials (Ohio Univ. pavement project)

Regarding research projects they're aware of:

- 87% heard of SHRP Pavement Project on Delaware 23
- 50% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 50% had heard of Comparison and Definition of State DOTs Practices ...
- 37% had heard of Ohio Freight Study
- 37% had heard of Innovative Bridge Design Construction Techniques to Expedite Construction

How did you hear of these projects?

- The only ones listed were the following:
- 37% said Transcript
- 37% said conferences (OCA, OTEC, Flexible Pavements)
- 37% said media

Preferred source of receiving info about research program:

- 62% report *Transcript*
- 50% report e-mail / listserv
- 37% report conferences (OCA, OTEC)
- 25% report Web page
- 37% report brochures

Types of research activities most interested in knowing about:

- 87% report best practices
- 75% report technical innovations
- 62% report training opportunities
- 62% report implementation
- 37% report Requests for Proposals
- 37% report Ohio's success stories
- 25% report strategic research plan

## 2.5 Ohio County Engineers Association Officers key findings

N = 7 / 11 = 64% response

Survey conducted October 2003

### *Key Summary Findings (complete survey results appear in Appendix E)*

57% report they are at least somewhat interested in ODOT's research program activities

Reasons why:

- 57% report they want to provide solutions to technical problems related to their work
- 43% report they want to extend their knowledge in their field

Regarding priorities of the research office:

- 71% report serving as a technical resource at least a high priority
- 71% report seeking out ways to improve ODOT activities at least somewhat of a priority
- 71% report to compile best practices at least somewhat of a priority

57% report that ODOT's research program is of average quality overall

72% report that ODOT's communication about its research program to county engineers is not effective

How they learn of ODOT research program activities:

- 43% through letters
- 43% through conferences (County Engineers Assn.)
- 29% through *Transcript*

Regarding research outcomes they've heard of:

- Vast majority aware of no outcomes

Regarding research projects they're aware of:

- 43% heard of SHRP Pavement Project on Delaware 23
- 29% had heard of Evaluation of Warranty Provisions on ODOT Construction Projects
- 29% had heard of Innovative Bridge Design Construction Techniques to Expedite Construction
- 29% had heard of Evaluation of Drainable Bases Under Asphalt Pavement
- 29% had heard of Comparison and Definition of State DOTs Practices ...

How did you hear of these projects?

- The only ones listed were the following:
- 43% said conferences (County Engineers Assn.)
- 14% said *Transcript*
- 14% said *Moving Forward*

Preferred source of receiving info about research program:

- 29% report *Transcript*
- 29% report *Moving Forward*
- 29% report e-mail / listserv

None felt they were part of the research office's strategic planning process

Types of research activities most interested in knowing about:

- 71% report best practices
- 71% report training opportunities
- 57% report technical innovations
- 57% report cost-saving measures
- 43% report technology transfer

## Appendix A OH College Civil Eng. Dept. Chairs Survey Results

**Q1. How interested are you in the activities of ODOT's research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid neutral	3	50.0	50.0	50.0
very interested	3	50.0	50.0	100.0
Total	6	100.0	100.0	

**Q1A. What is the motivation for your interest?**

**To extend my knowledge in my field**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	66.7	100.0	100.0
Missing System	2	33.3		
Total	6	100.0		

**To interact with researchers and engage in different activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	33.3	50.0	50.0
no	2	33.3	50.0	100.0
Total	4	66.7	100.0	
Missing System	2	33.3		
Total	6	100.0		

**To support graduate studies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	33.3	50.0	50.0
no	2	33.3	50.0	100.0
Total	4	66.7	100.0	
Missing System	2	33.3		
Total	6	100.0		

**To support faculty research**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	33.3	50.0	50.0
no	2	33.3	50.0	100.0
Total	4	66.7	100.0	
Missing System	2	33.3		
Total	6	100.0		

**Part of my institutional mission**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	50.0	75.0	75.0
	no	1	16.7	25.0	100.0
	Total	4	66.7	100.0	
Missing	System	2	33.3		
Total		6	100.0		

**other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	66.7	100.0	100.0
Missing	System	2	33.3		
Total		6	100.0		

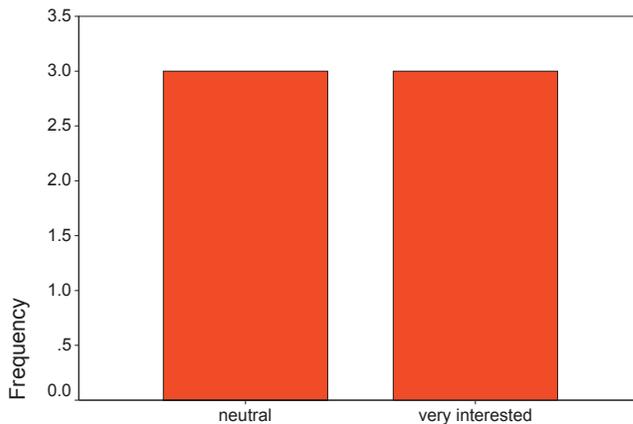
**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	100.0	100.0	100.0

**Q1B. If you responded with a "4" or "5" to the question above, how has your interest in ODOT's research program affected your department or institution?**

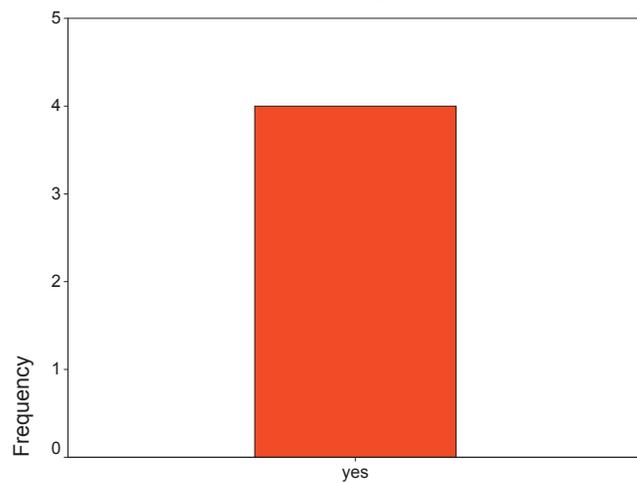
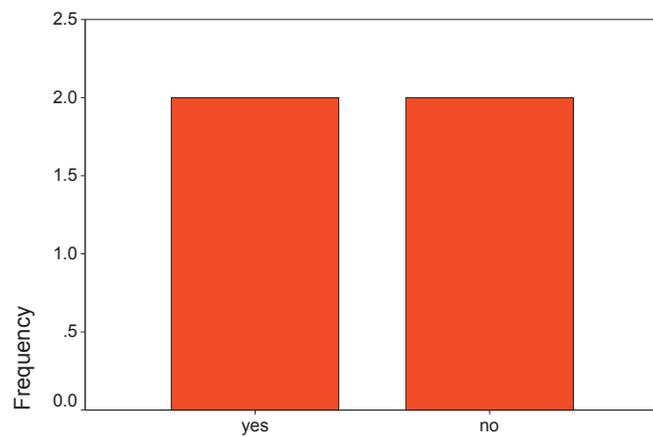
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	dept. depends on ODOT funding	5	83.3	83.3	83.3
	Total	6	100.0	100.0	100.0

How interested are you in the activities of ODOT's research program?

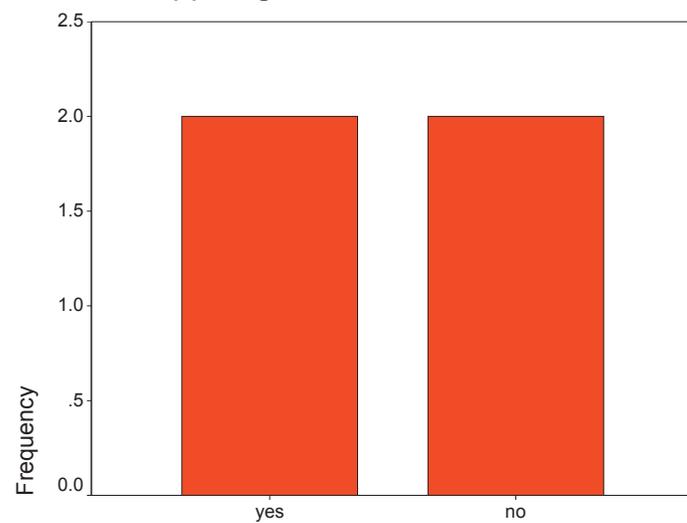


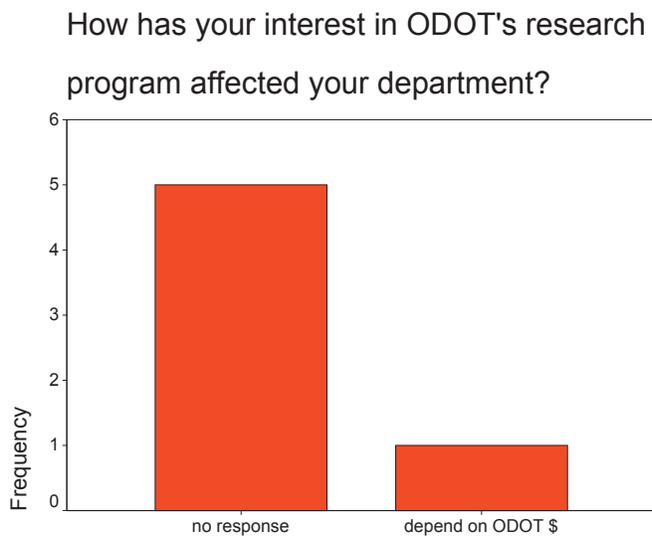
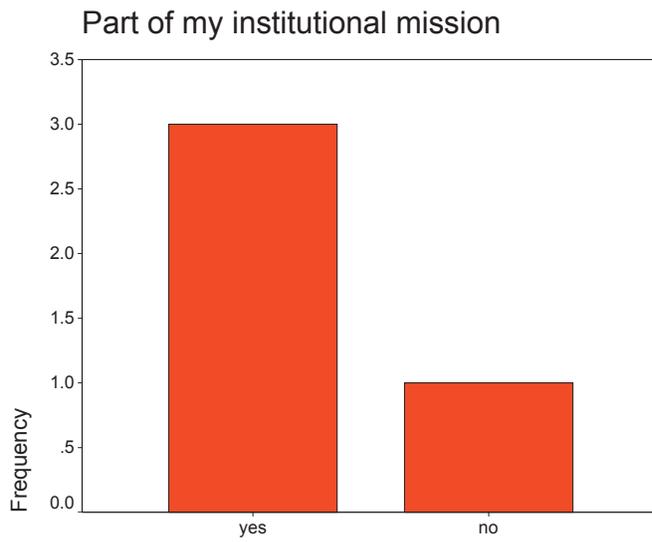
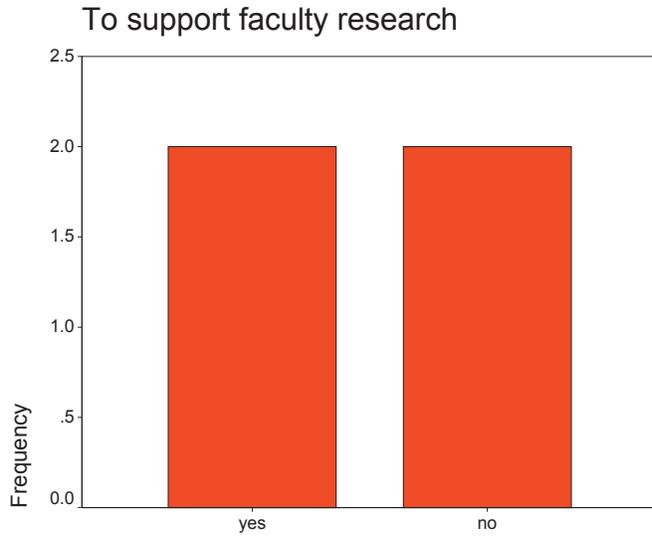
**What is the motivation for your interest?**

To extend my knowledge in my field

To interact with researchers and  
engage in different activities

To support graduate studies





**Q2. Regardless of your level of interest or involvement, please rate the following activities you expect from ODOT's research program, according to their priority.**

**To solve problems for constituents/trouble-shooting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	1	16.7	16.7	16.7
high priority	3	50.0	50.0	66.7
very high priority	2	33.3	33.3	100.0
Total	6	100.0	100.0	

**To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	2	33.3	33.3	33.3
somewhat a priority	2	33.3	33.3	66.7
high priority	1	16.7	16.7	83.3
very high priority	1	16.7	16.7	100.0
Total	6	100.0	100.0	

**To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	1	16.7	16.7	16.7
high priority	3	50.0	50.0	66.7
very high priority	2	33.3	33.3	100.0
Total	6	100.0	100.0	

**To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	1	16.7	16.7	16.7
high priority	4	66.7	66.7	83.3
very high priority	1	16.7	16.7	100.0
Total	6	100.0	100.0	

**To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	2	33.3	33.3	33.3
high priority	3	50.0	50.0	83.3
very high priority	1	16.7	16.7	100.0
Total	6	100.0	100.0	

**To recruit new engineers from universities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewaht a priority	4	66.7	80.0	80.0
	high priority	1	16.7	20.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**To suport graduate studies and faculty research**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high priority	3	50.0	60.0	60.0
	very high priority	2	33.3	40.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**To build relationships with universities**

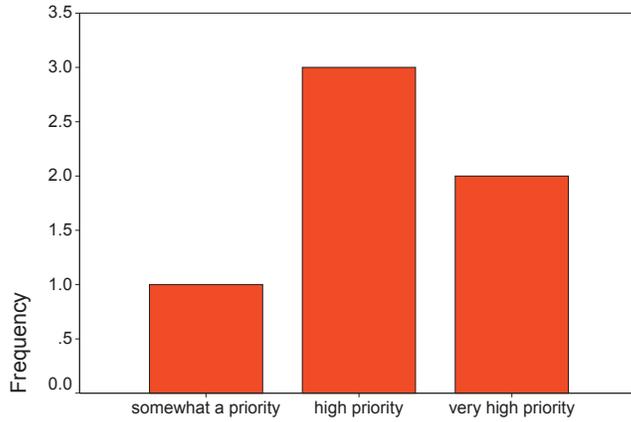
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat a priority	3	50.0	60.0	60.0
	high priority	2	33.3	40.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**other**

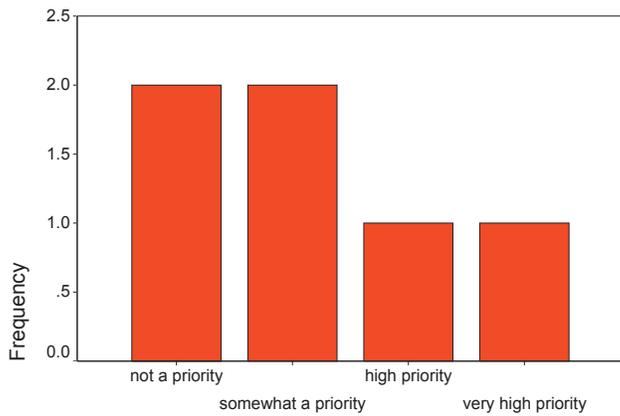
		Frequency	Percent
Missing	System	6	100.0

Regardless of your level of interest or involvement, please rate the following activities you expect from ODOT's research program, according to their priority.

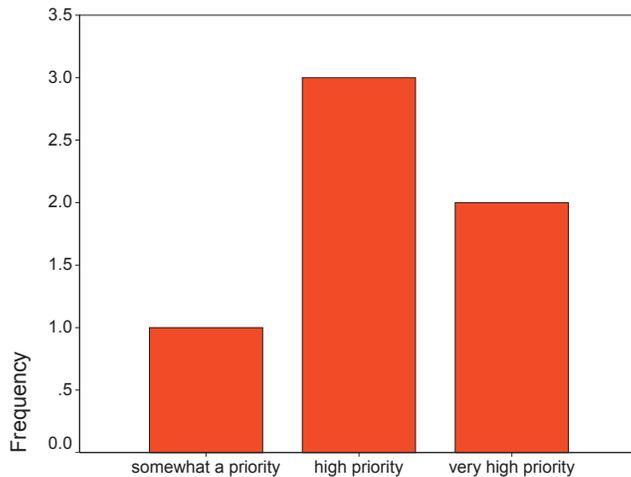
To solve problems for constituents/trouble-shooting



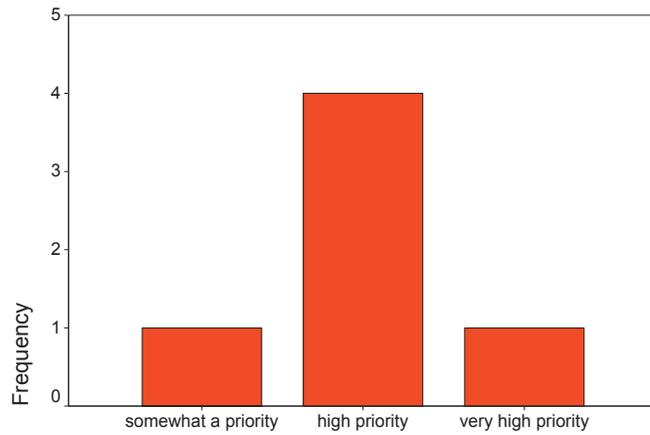
To attain national recognition for Ohio and ODOT



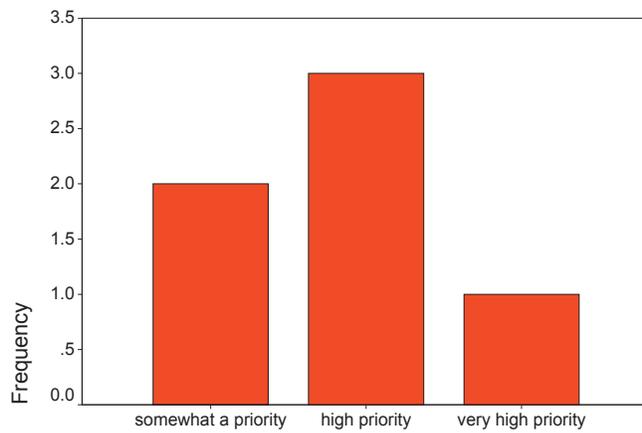
To serve as a technical resource



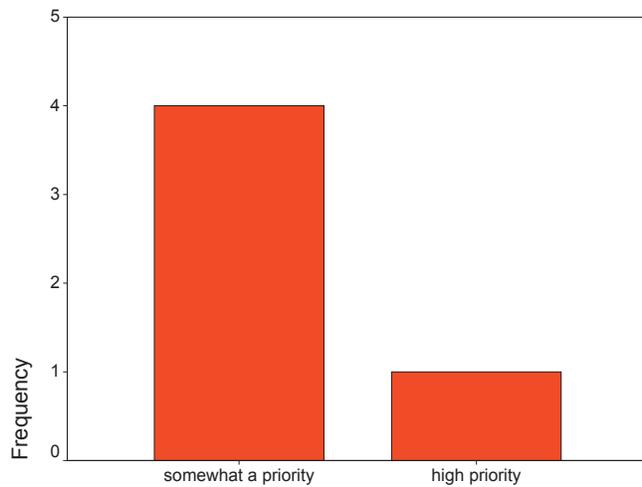
To seek out or propose ways to improve  
ODOT activities



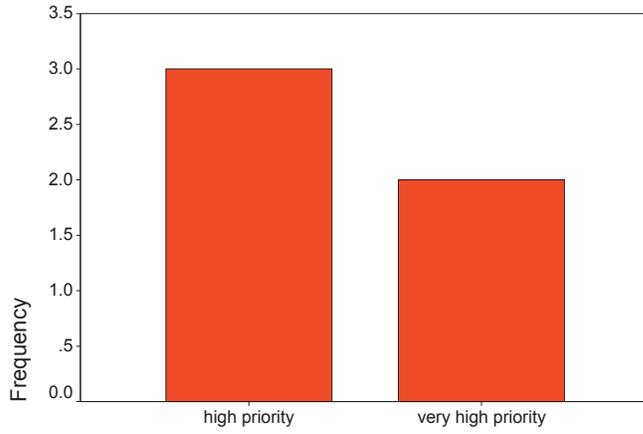
To compile best practices from  
peers and other organizations



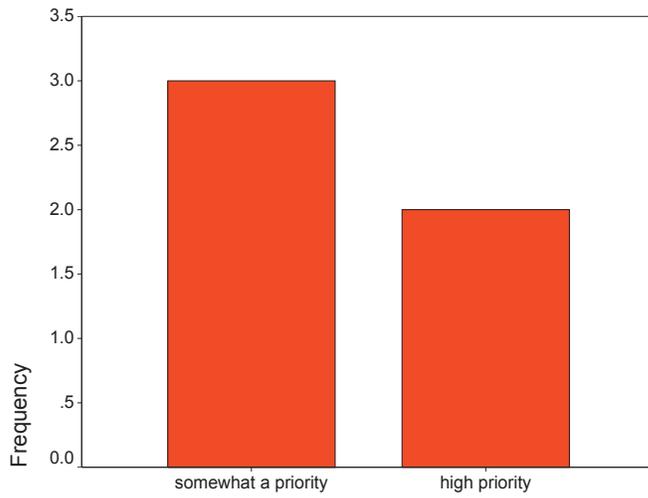
To recruit new engineers from universities



### To suport graduate studies and faculty research



### To build relationships with universities



**Q3. How do you learn of ODOT research program projects or activities?****Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Personal e-mails or listservs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	33.3	40.0	40.0
	no	3	50.0	60.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	50.0	60.0	60.0
	no	2	33.3	40.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Conferences such as OTEC**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	50.0	60.0	60.0
	no	2	33.3	40.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no answer	4	66.7	66.7	66.7
	co.eng.assn.	1	16.7	16.7	83.3
	OTEC	1	16.7	16.7	100.0
	Total	6	100.0	100.0	

**Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Colleagues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no answer	5	83.3	83.3	83.3
	conferences	1	16.7	16.7	100.0
	Total	6	100.0	100.0	

**Researchers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

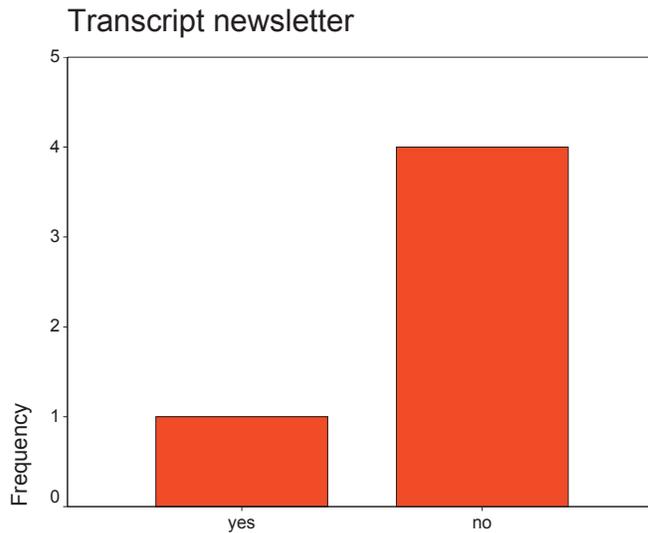
**specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no answer	5	83.3	83.3	83.3
	conferences	1	16.7	16.7	100.0
	Total	6	100.0	100.0	

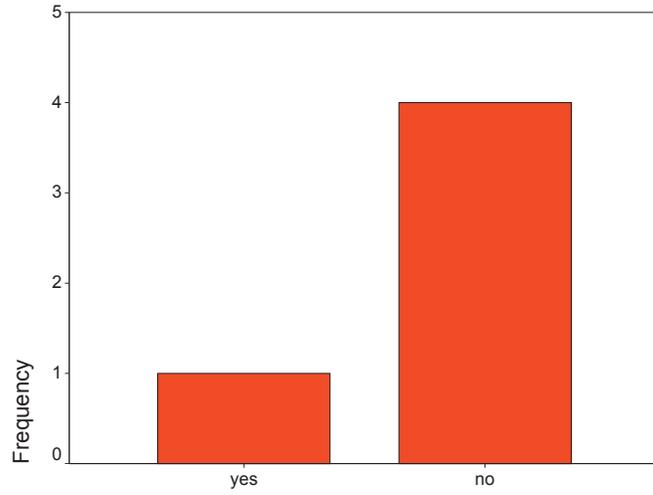
**other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	66.7	100.0	100.0
Missing	System	2	33.3		
Total		6	100.0		

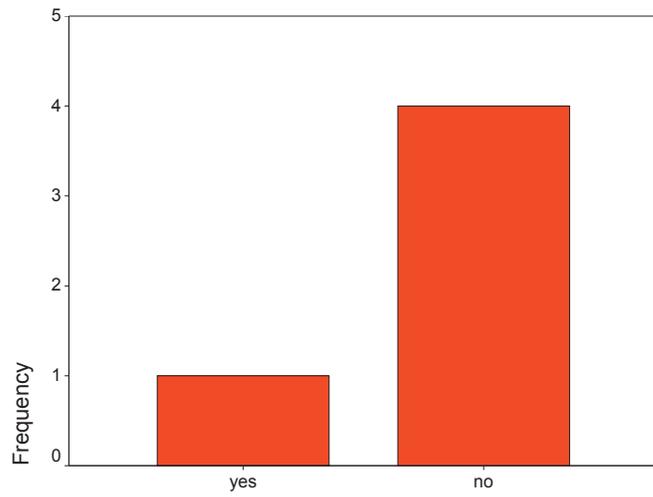
**How do you learn of ODOT research program projects or activities?**



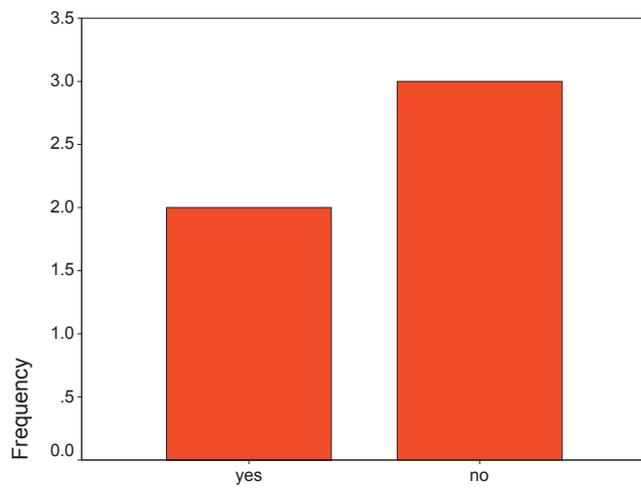
Moving Forward research newsletter



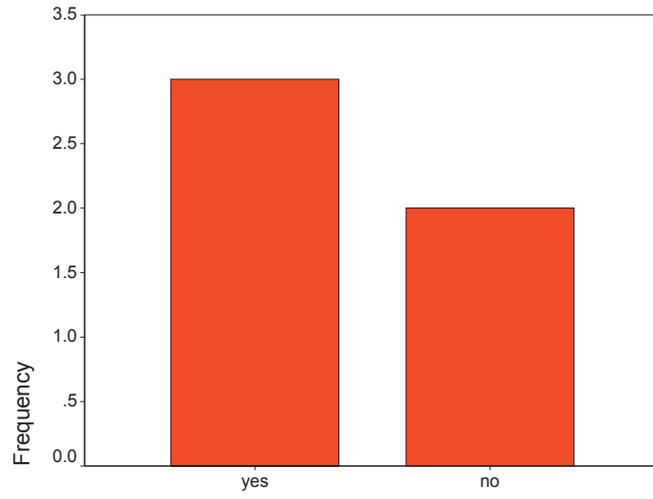
Letters



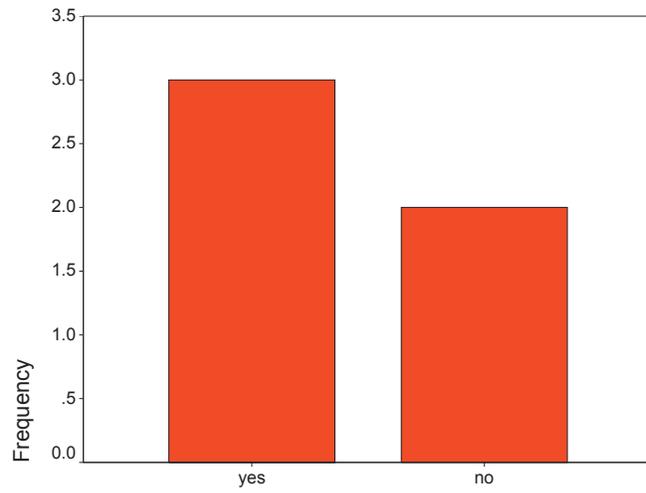
Personal e-mails or listservs



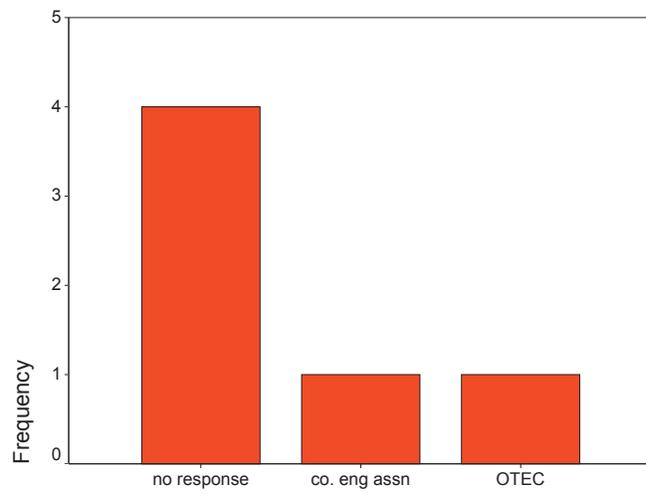
Web page



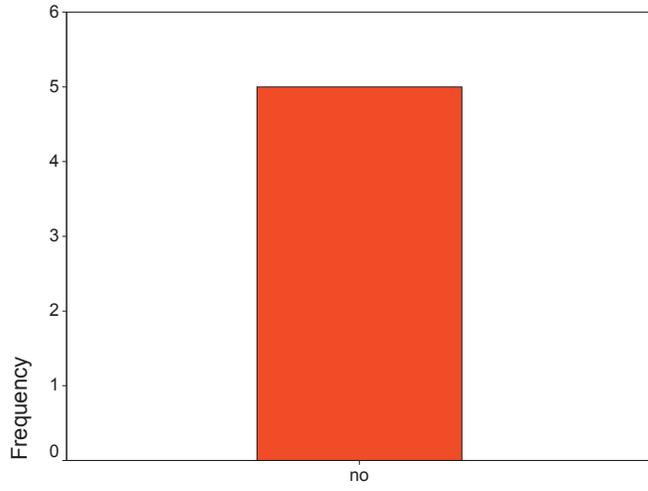
Conferences such as OTEC



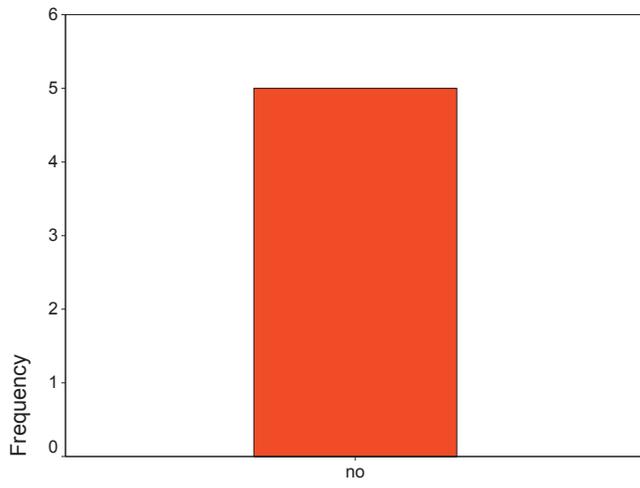
specify



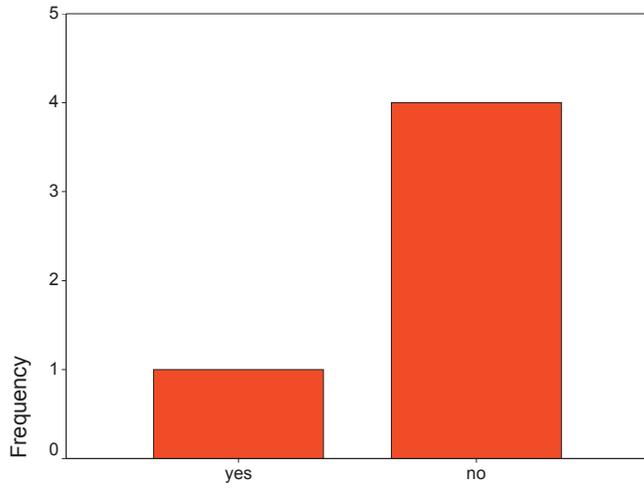
Brochures

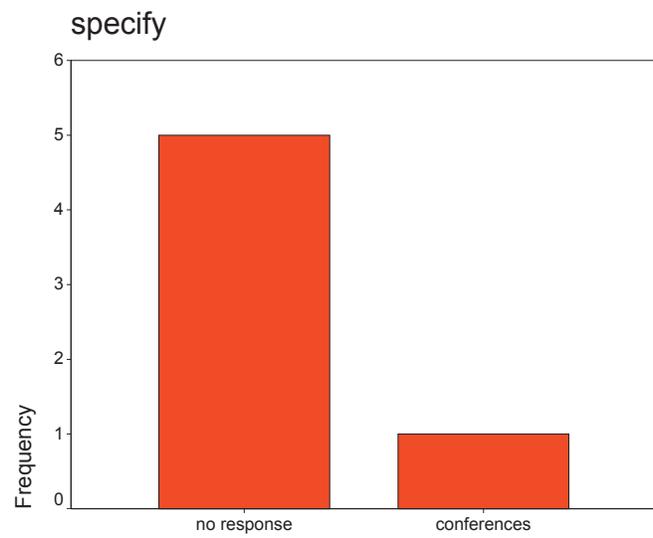
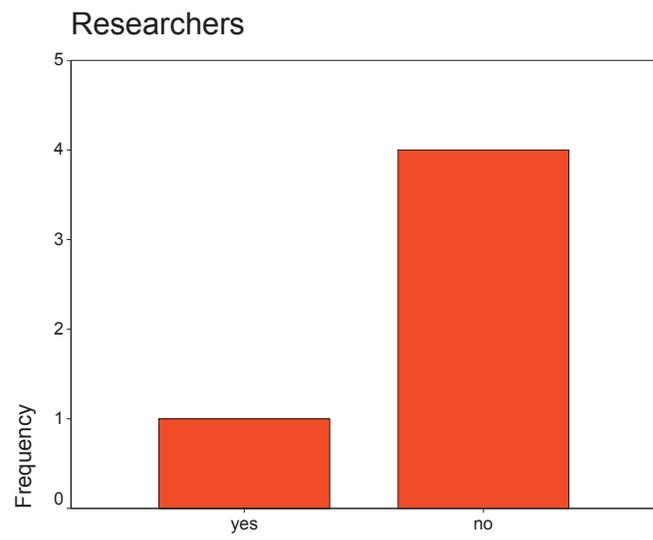
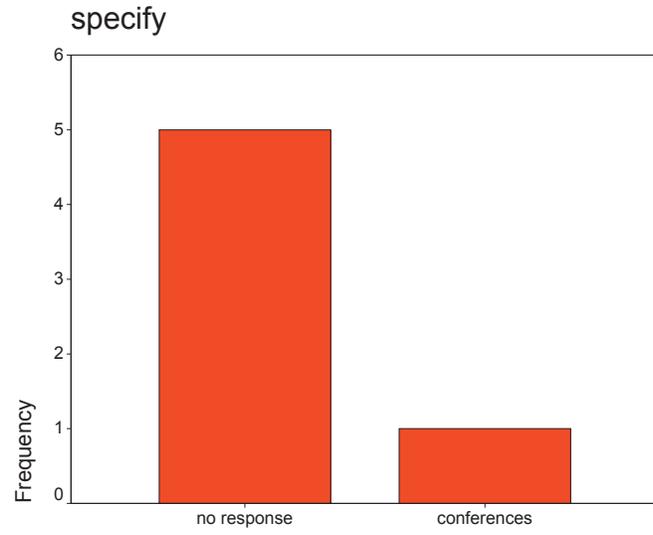


Media (newspaper, TV, radio)



Colleagues

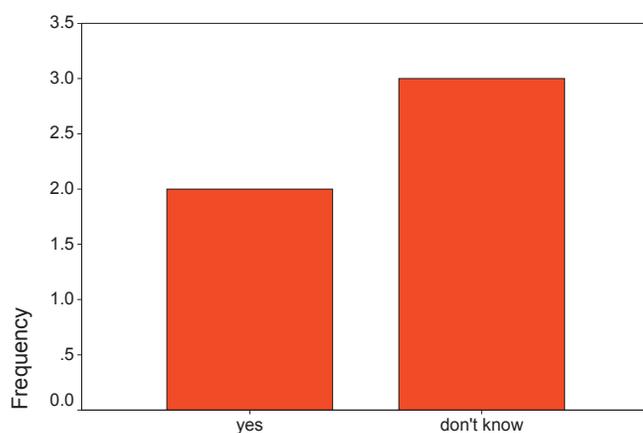




**Q4. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	33.3	40.0	40.0
	don't know/not applicable	3	50.0	60.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

Do you find the Research Office  
to be accessible?



**Q5. What is your preferred source of info?**

**Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Personal e-mail or listserv**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	66.7	80.0	80.0
	no	1	16.7	20.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no answer	4	66.7	66.7	66.7
	CEAO	1	16.7	16.7	83.3
	winter	1	16.7	16.7	100.0
	CE Assn.	1	16.7	16.7	100.0
Total		6	100.0	100.0	

**brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	66.7	100.0	100.0
Missing	System	2	33.3		
Total		6	100.0		

**Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**Colleagues**

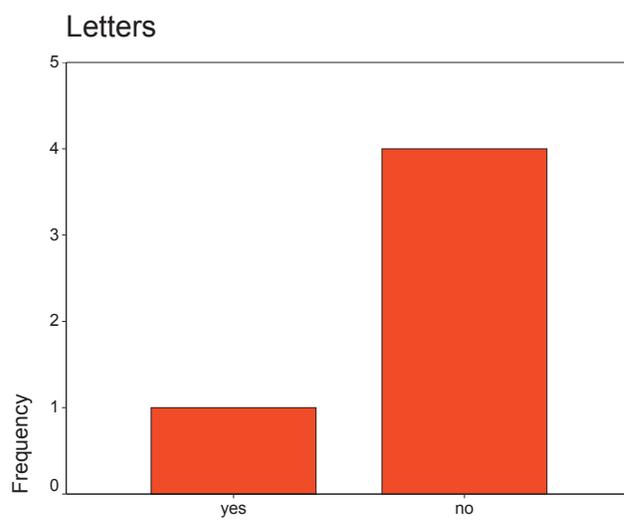
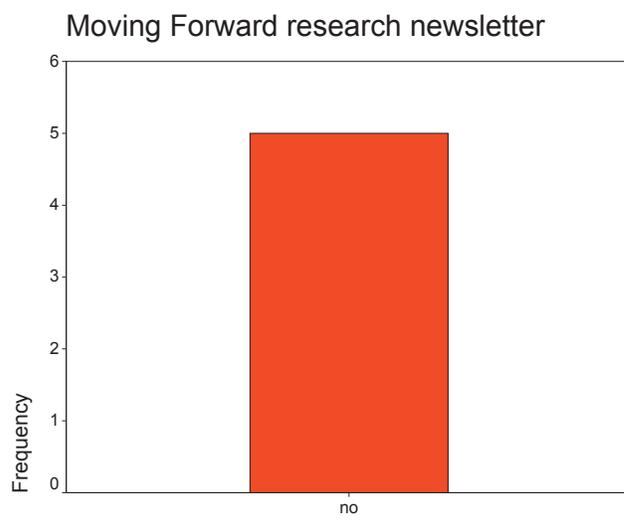
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	20.0	20.0
	no	4	66.7	80.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

**RFPs**

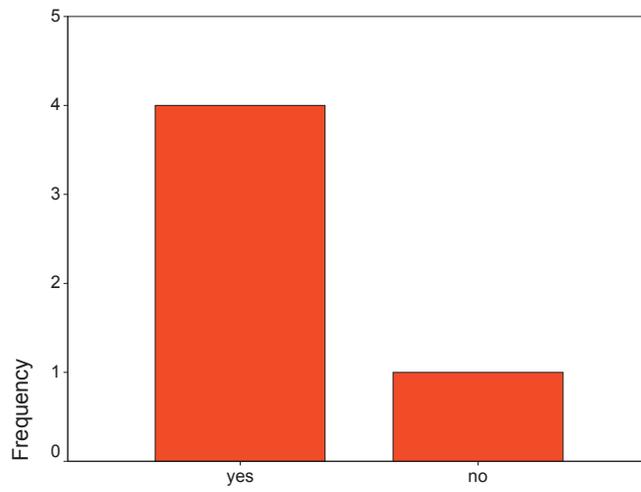
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	16.7	25.0	25.0
	no	3	50.0	75.0	100.0
	Total	4	66.7	100.0	
Missing	System	2	33.3		
Total		6	100.0		

**other**

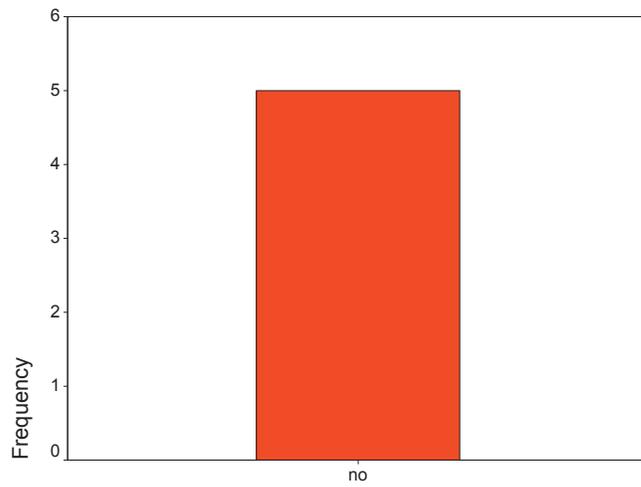
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	83.3	100.0	100.0
Missing	System	1	16.7		
Total		6	100.0		

**What is your preferred source of info?**

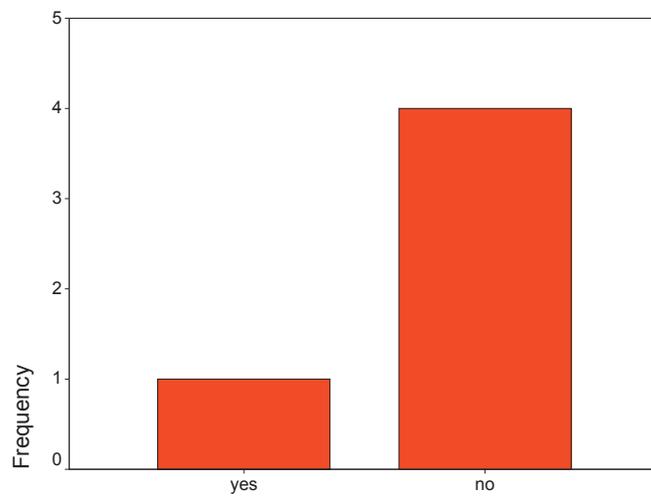
Personal e-mail or listserv

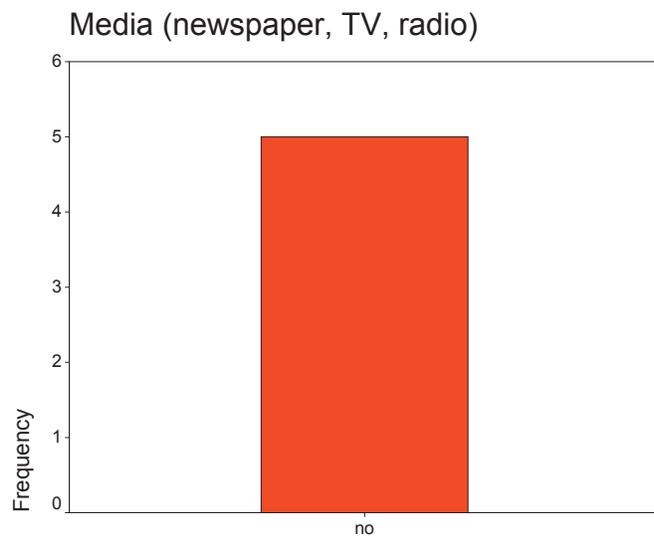
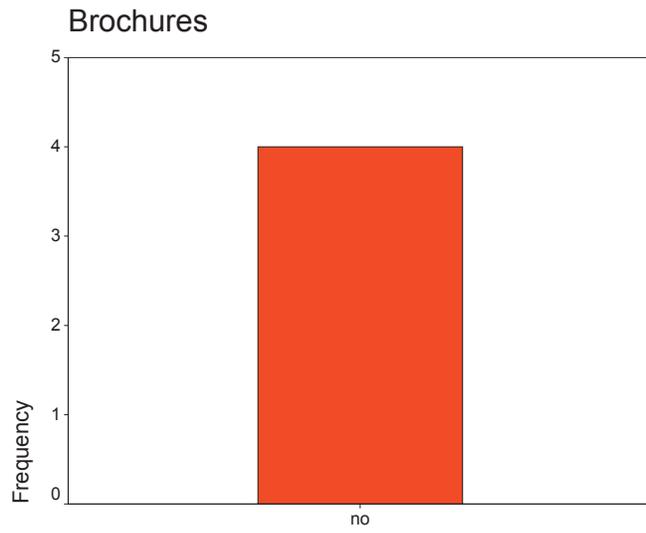
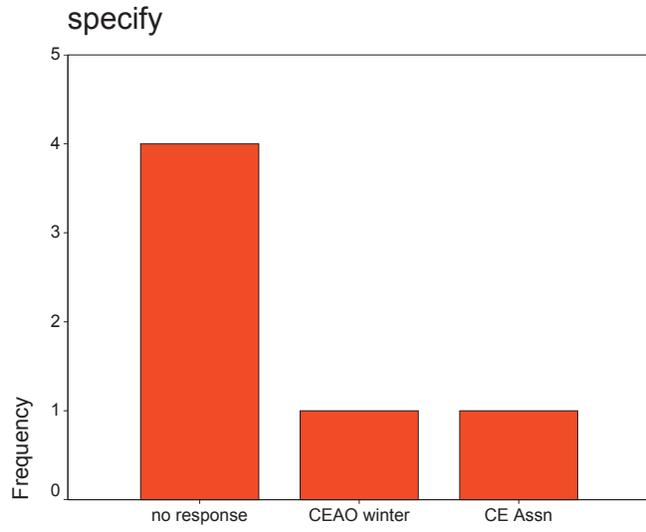


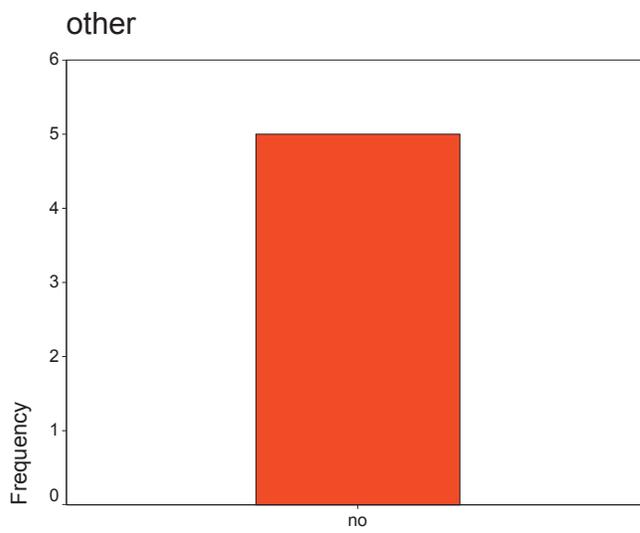
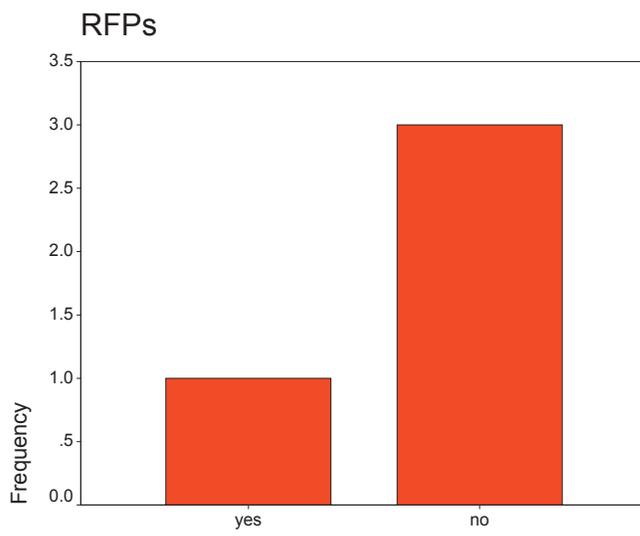
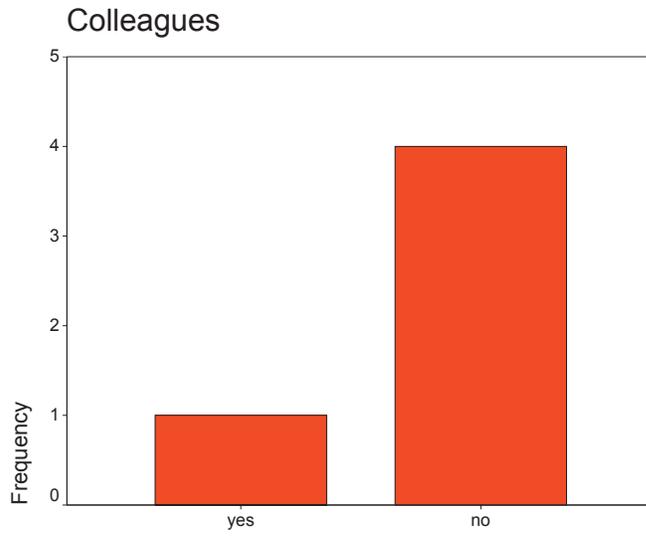
Web page



Conferences



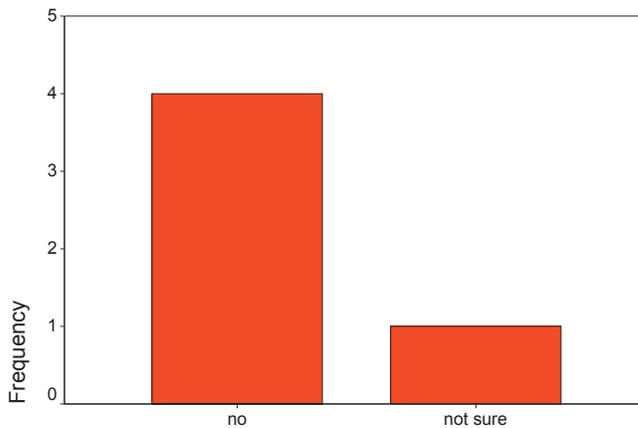




**Q6. Do you feel that you are part of the research program's strategic planning process?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	4	66.7	80.0	80.0
	not sure	1	16.7	20.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

Do you feel that you are part of the research  
strategic planning process?

**Q7. What types of research office activities are you most interested in knowing about?****Requests for Proposals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	66.7	66.7	66.7
	no	2	33.3	33.3	100.0
Total		6	100.0	100.0	

**Ohio's success stories**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	100.0	100.0	100.0

**Best practices (local, national, etc.)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	66.7	66.7	66.7
	no	2	33.3	33.3	100.0
Total		6	100.0	100.0	

**Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	66.7	66.7	66.7
no	2	33.3	33.3	100.0
Total	6	100.0	100.0	

**Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	66.7	66.7	66.7
no	2	33.3	33.3	100.0
Total	6	100.0	100.0	

**Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	100.0	100.0	100.0

**Strategic research plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	16.7	16.7	16.7
no	5	83.3	83.3	100.0
Total	6	100.0	100.0	

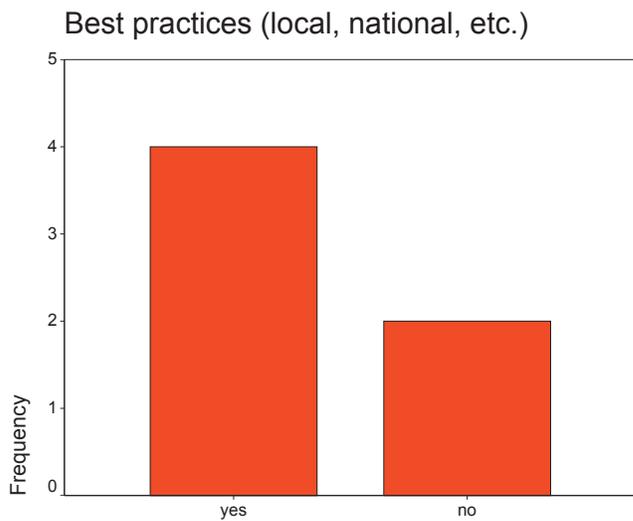
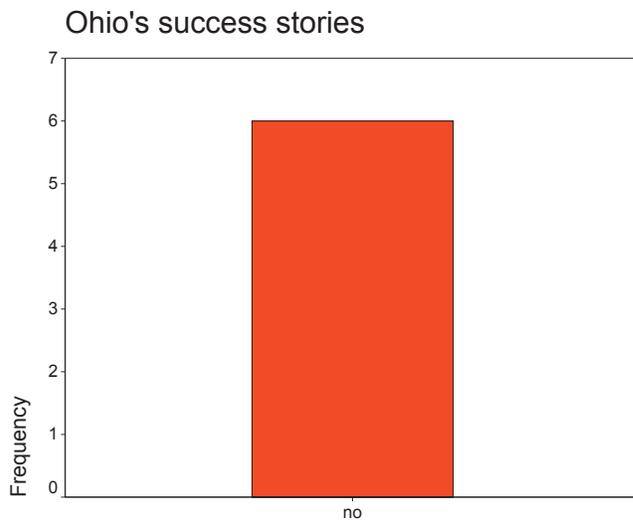
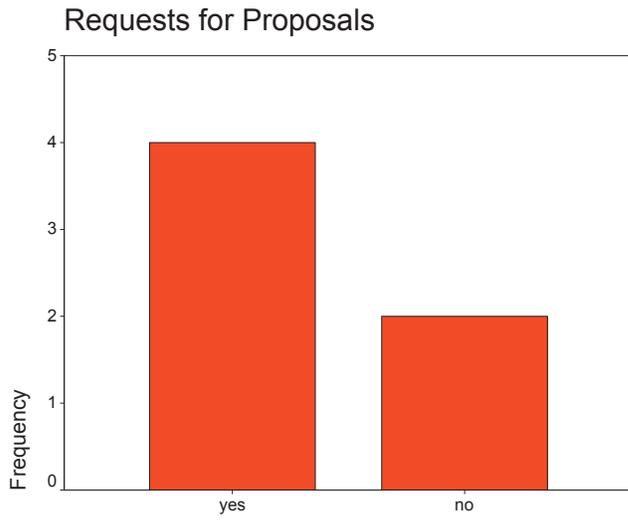
**Training opportunities**

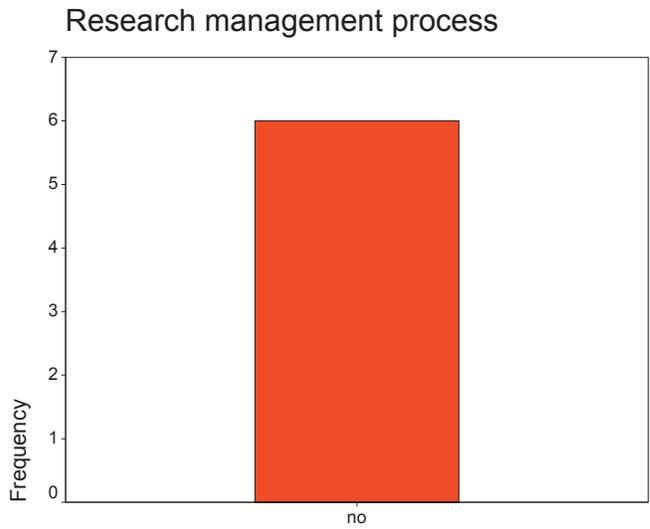
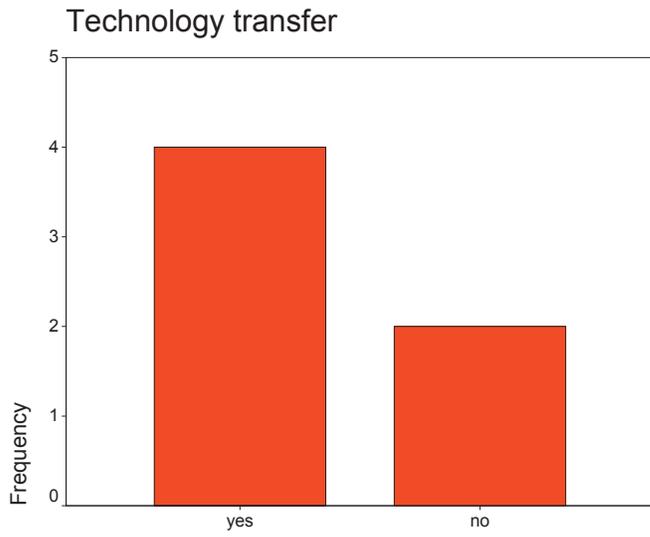
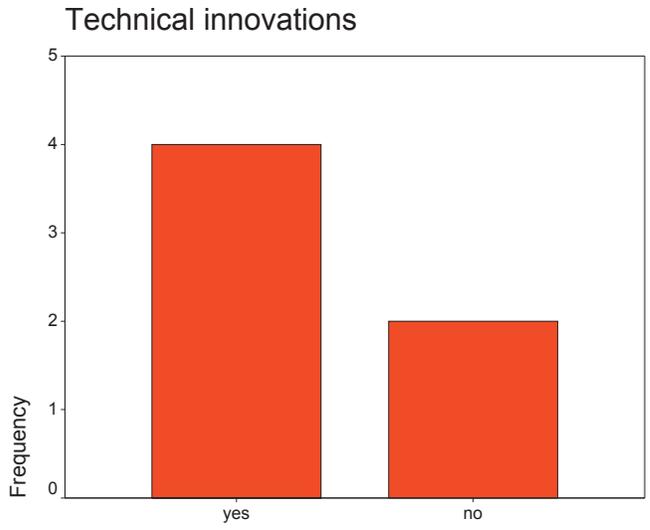
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	66.7	66.7	66.7
no	2	33.3	33.3	100.0
Total	6	100.0	100.0	

**Implementation**

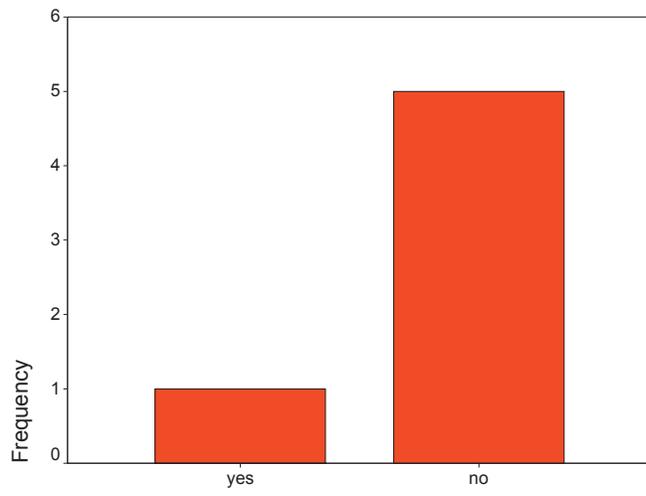
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	16.7	16.7	16.7
no	5	83.3	83.3	100.0
Total	6	100.0	100.0	

**What types of research office activities are you most interested in knowing about?**

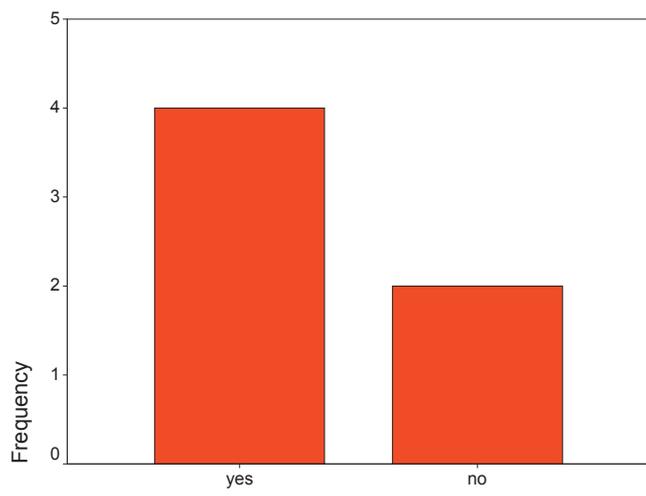




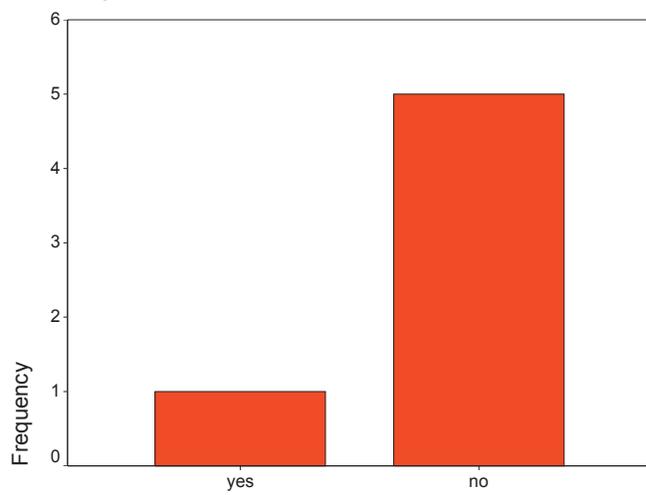
Strategic research plan



Training opportunities



Implementation



**Q8. Does your department conduct research for other state DOTs?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	33.3	40.0	40.0
	no	3	50.0	60.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

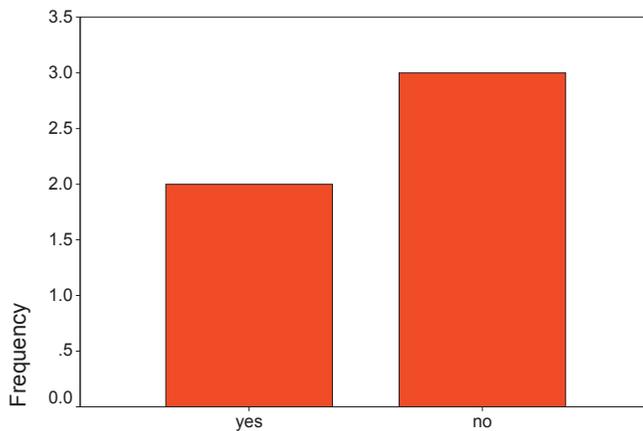
**Q8A. If yes, on a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program, what is your impression of the quality of ODOT's research program relative to other states?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	average quality	1	16.7	50.0	50.0
	good quality	1	16.7	50.0	100.0
	Total	2	33.3	100.0	
Missing	System	4	66.7		
Total		6	100.0		

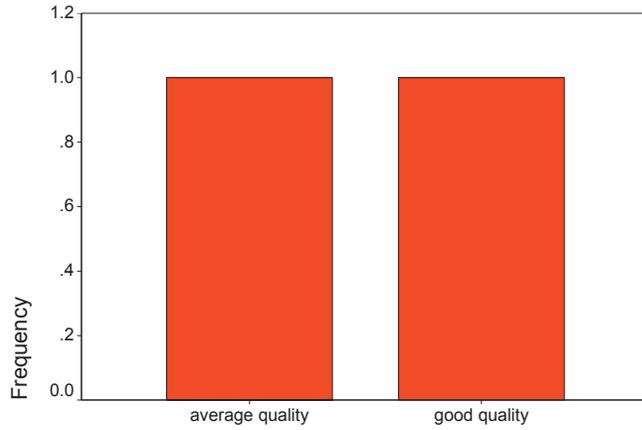
**Q8B. If you answered yes to q. 8, on a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program relative to other state DOTs?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neutral	2	33.3	100.0	100.0
Missing	System	4	66.7		
Total		6	100.0		

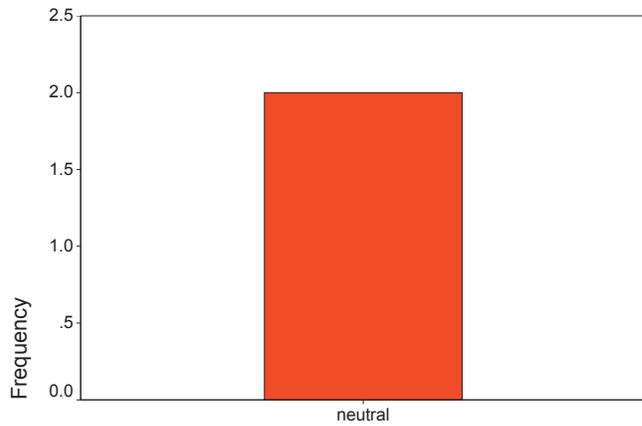
Does your department conduct research for other state DOTs?



What is your impression of ODOT's program relative to other states?



What is your impression of ODOT's communication about its research program?



**Q9. Does your department conduct research for other state or federal government agencies?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	83.3	100.0	100.0
Missing System	1	16.7		
Total	6	100.0		

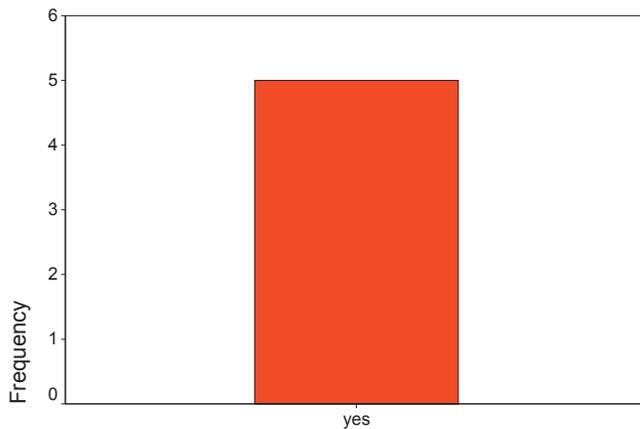
**Q9A. If yes, on a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program, what is your impression of the quality of ODOT's research program relative to other government agencies?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below average quality	1	16.7	20.0	20.0
	average quality	3	50.0	60.0	80.0
	good quality	1	16.7	20.0	100.0
	Total	5	83.3	100.0	
Missing	System	1	16.7		
Total		6	100.0		

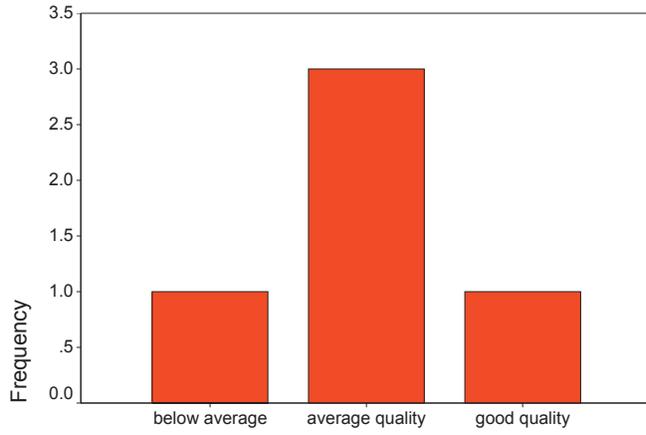
**Q9B. If you answered yes to q. 9, on a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program relative to other government agencies?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neutral	4	66.7	100.0	100.0
Missing	System	2	33.3		
Total		6	100.0		

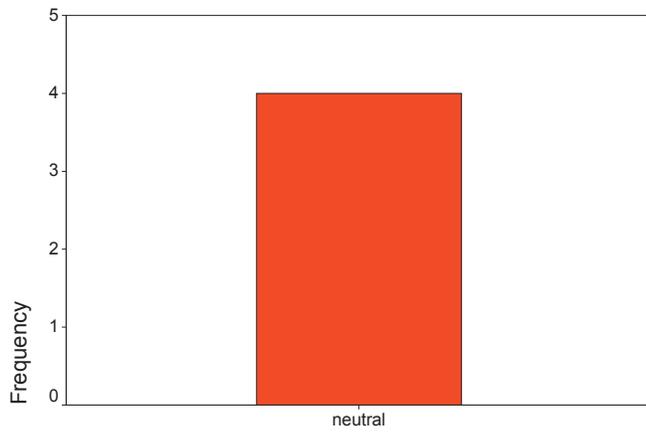
Does your department conduct research for other states or the federal government?



What is your impression of ODOT's program relative to other agencies?



What is your impression of ODOT's communication relative to others?



## Appendix B Ohio Legislators Survey Results

**Q1: On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you of ODOT research program activities?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 neutral	1	33.3	33.3	33.3
	4 interested	2	66.7	66.7	100.0
	Total	3	100.0	100.0	

**Q1A: What is the motivation for your interest?**

### Q1A1 Part of my legislative responsibilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	66.7	100.0	100.0
Missing	System	1	33.3		
	Total	3	100.0		

### Q1A2 To extend my knowledge of the transportation field

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
	Total	3	100.0		

### Q1A3 To interact with researchers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
	Total	3	100.0		

**Q1A4 To provide solutions to technical problems relating to my constituents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	50.0	50.0
	2 no	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	System	1	33.3		
	Total	3	100.0		

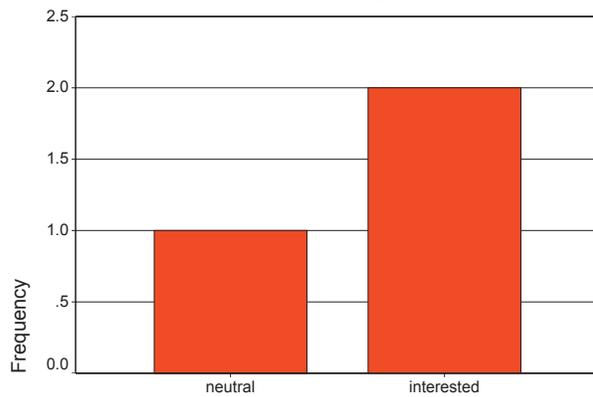
**Q1A5 Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

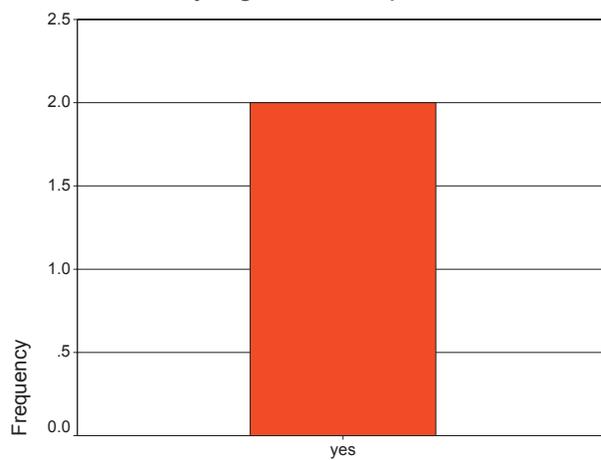
**Q1A6 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

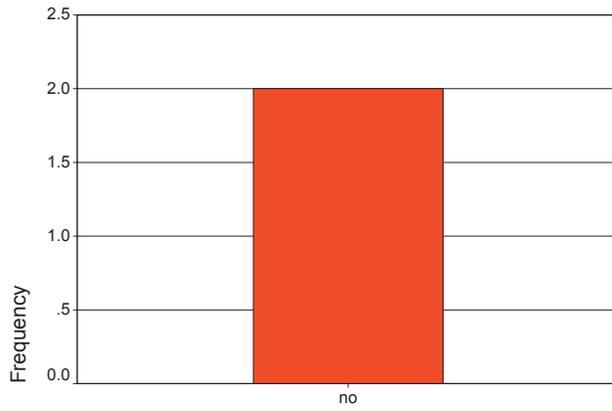
How interested are you in the activities of ODOT's research program



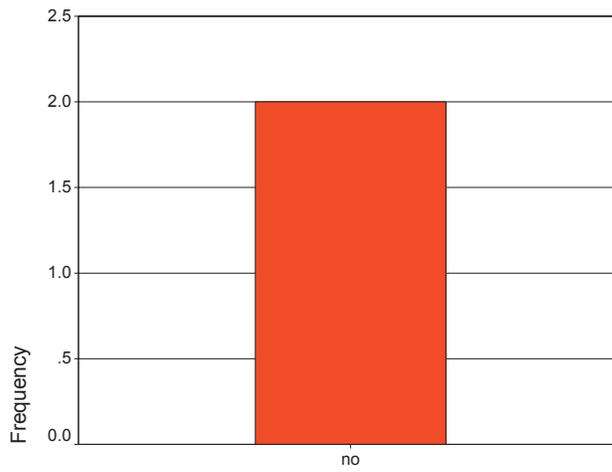
Part of my legislative responsibilities



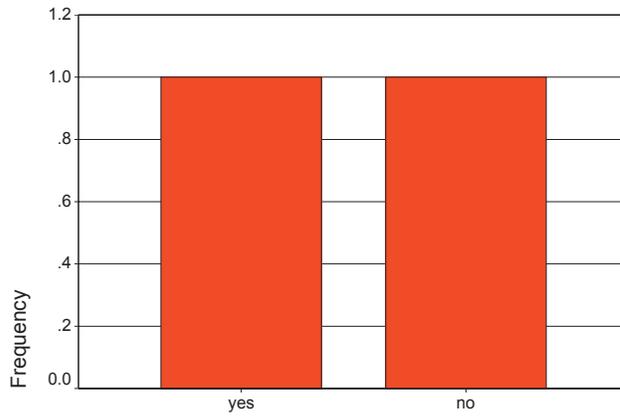
To extend my knowledge of  
the transportation field



To interact with researchers



To provide solutions to technical problems  
relating to my constituents



**Q2: Regardless of your level of interest or involvement, please rate the following activities you expect from ODOT's research program according to their priority. (please rate) 0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority**

**Q2A To solve problems for constituents/trouble-shooting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	33.3	33.3	33.3
some priority	1	33.3	33.3	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2B To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no response	2	66.7	66.7	66.7
not a priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2C To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid none	1	33.3	33.3	33.3
some priority	1	33.3	33.3	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2D To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid some priority	2	66.7	66.7	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2E To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid some priority	2	66.7	66.7	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

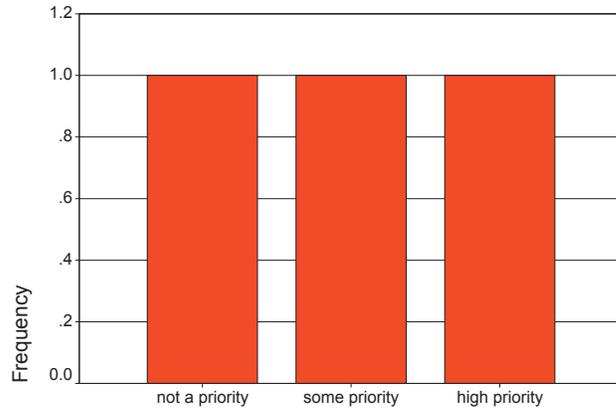
**Q2F Other**

	Frequency	Percent
Missing System	3	100.0

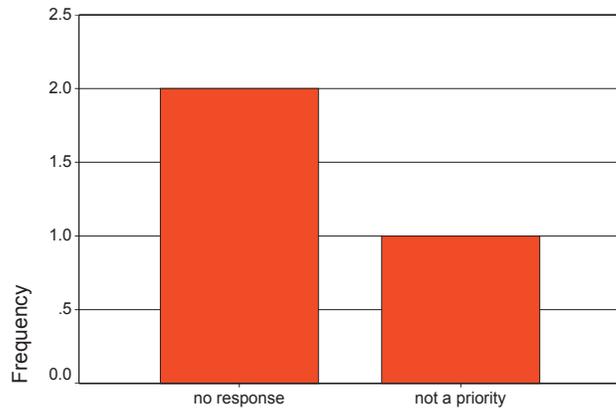
**Q2G Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	3	100.0	100.0	100.0

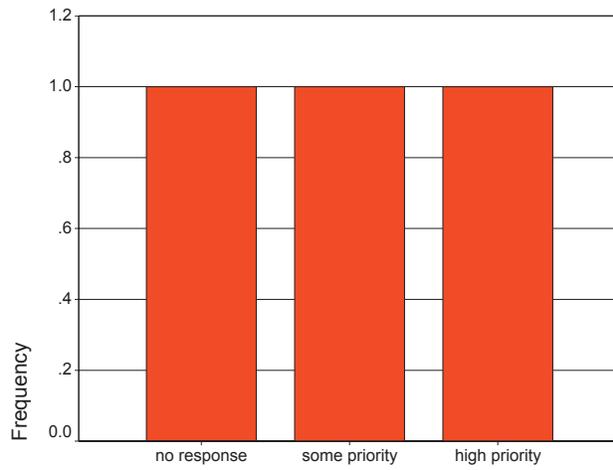
To solve problems for constituents/  
trouble-shooting



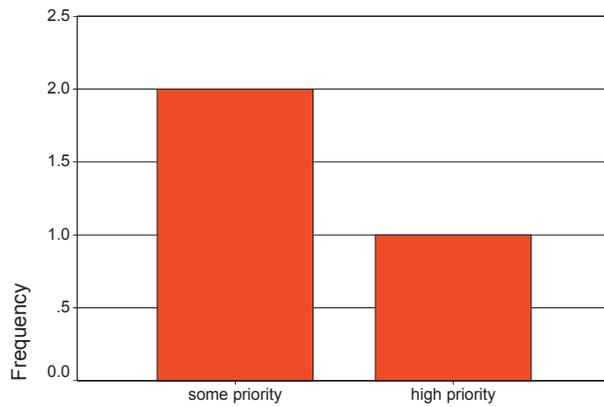
To attain national recognition for Ohio  
and ODOT



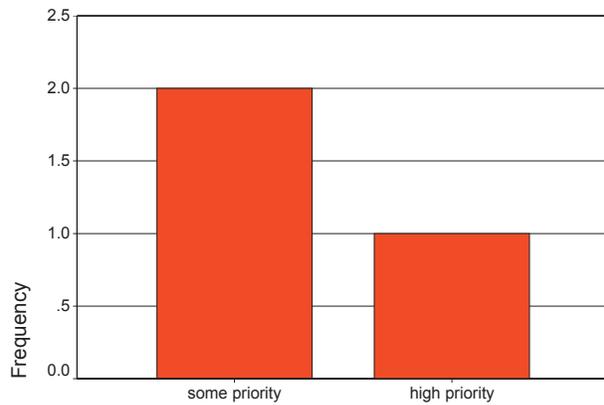
### To serve as a technical resource



### To seek out or propose ways to improve ODOT activities



### To compile best practices from peers and other organizations



**Q3: How do you learn of ODOT research program projects or activities? (please note all that apply)**

**Q3A Transcript Newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3B Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3C DOT Secretary**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q3D Memo/letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3E E-mails/listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3F Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3G Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q3H Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q3I Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q3K Colleague**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q3M Researchers**

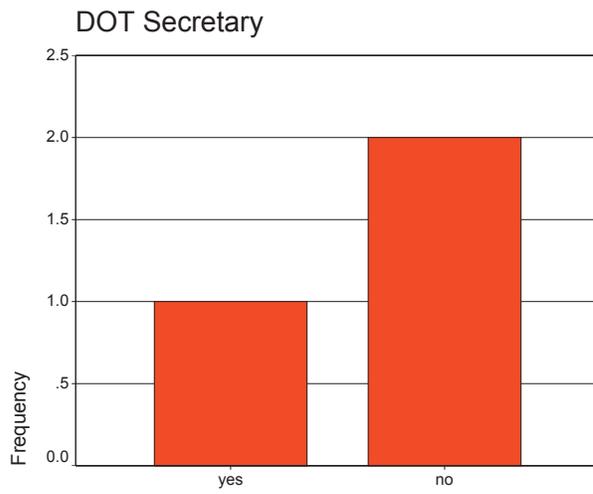
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

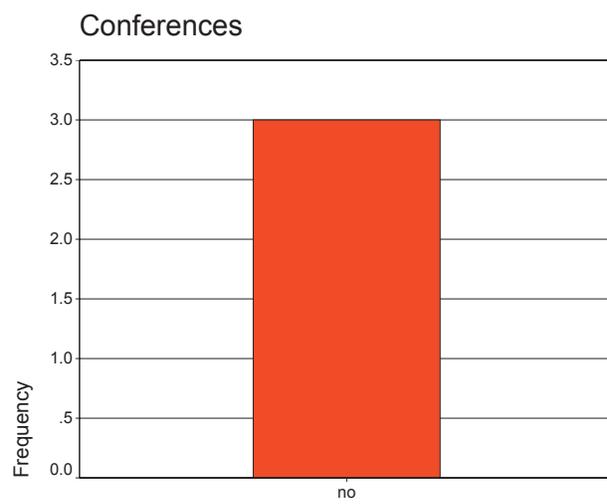
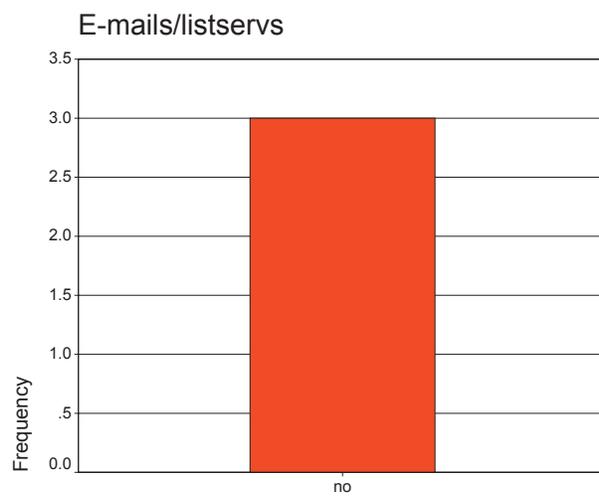
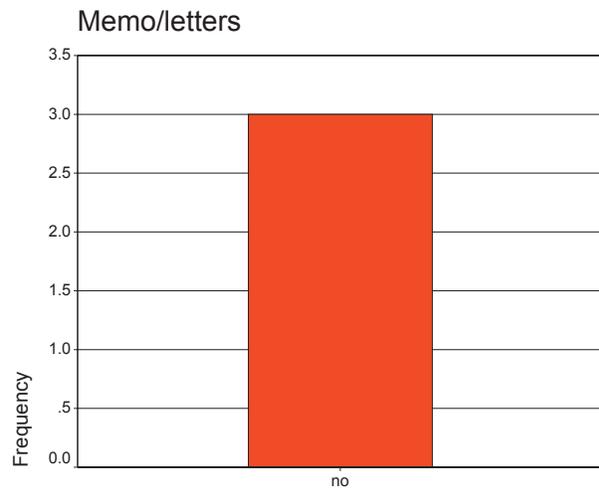
**Q3O Other**

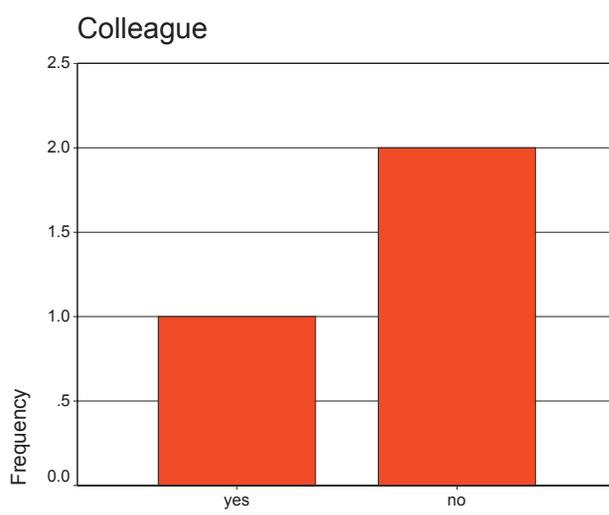
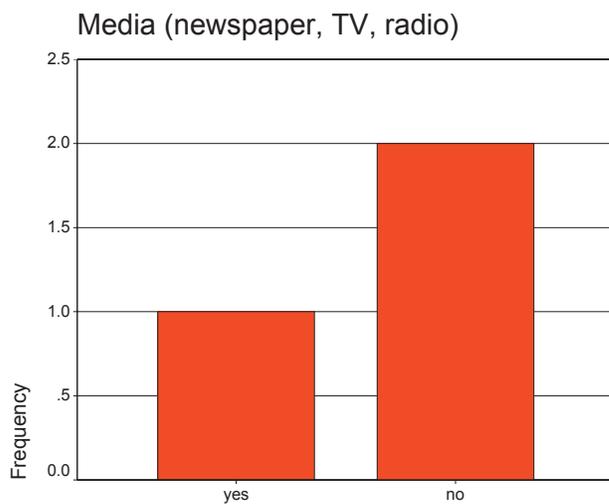
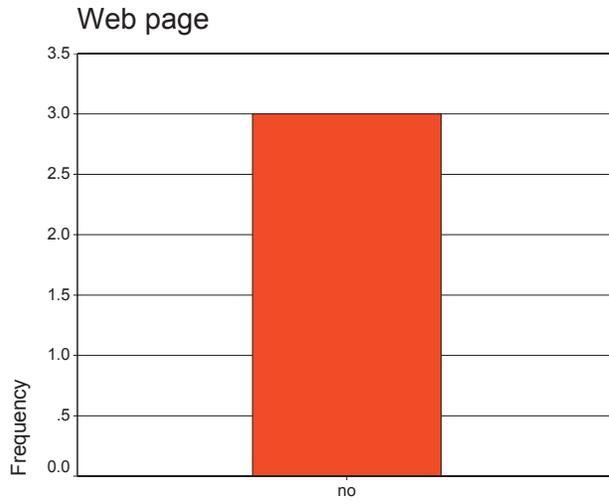
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

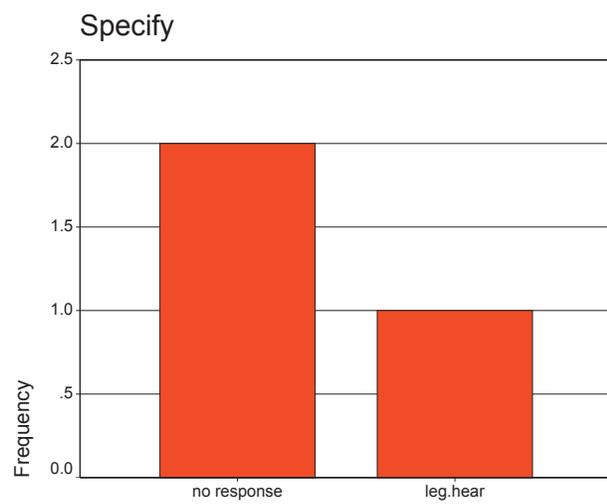
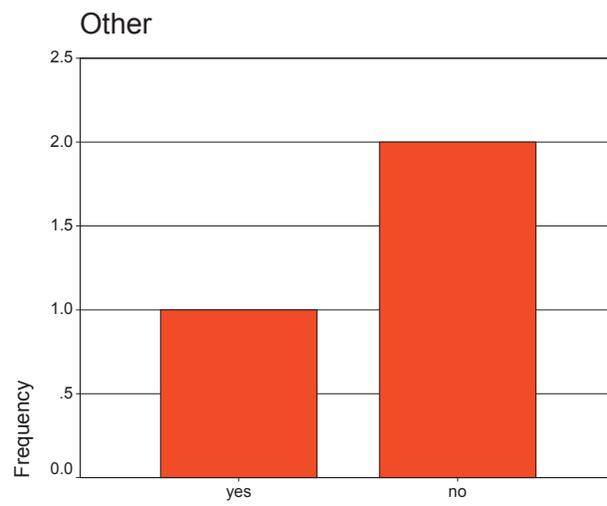
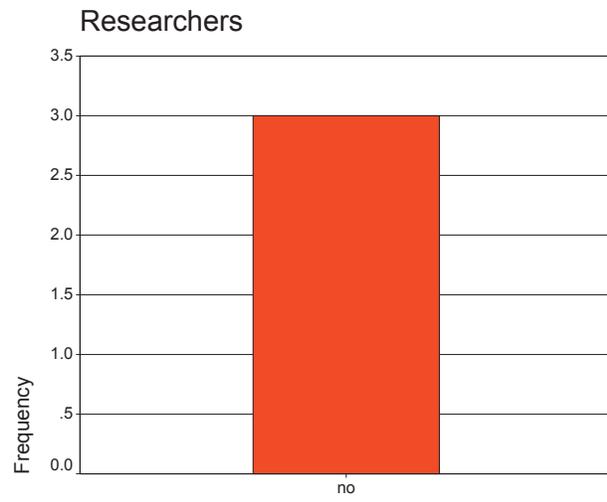
**Q3P Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
leg.hear	1	33.3	33.3	100.0
Total	3	100.0	100.0	





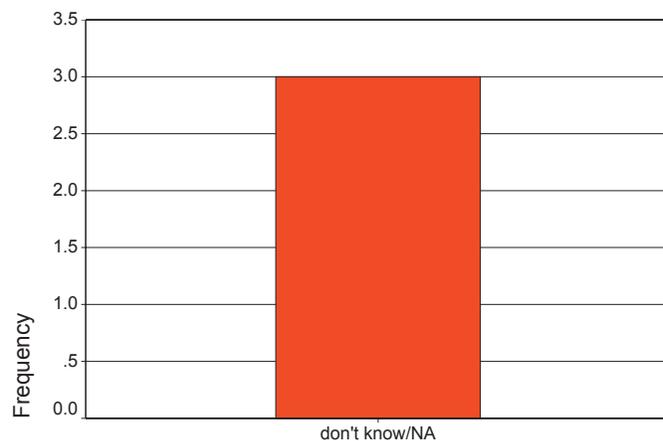




**Q4 Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4 don't know/not applicable	3	100.0	100.0	100.0

Do you find the Research Office  
to be accessible?



**Q5:Are you aware of any research program activities that resulted in the following? (please check all that apply)**

**Q5A Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q5C Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q5E Safety improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q5G Quality improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q5I Better materials**

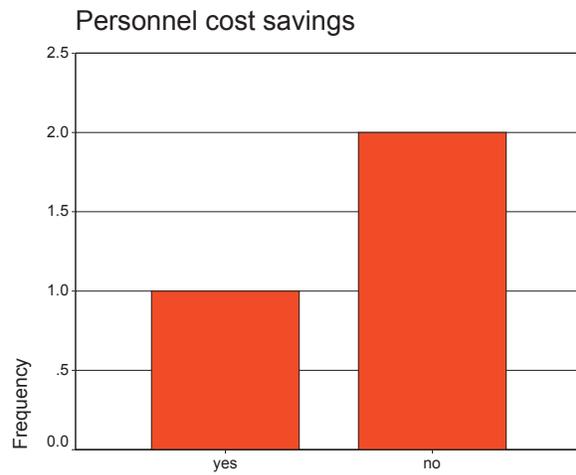
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

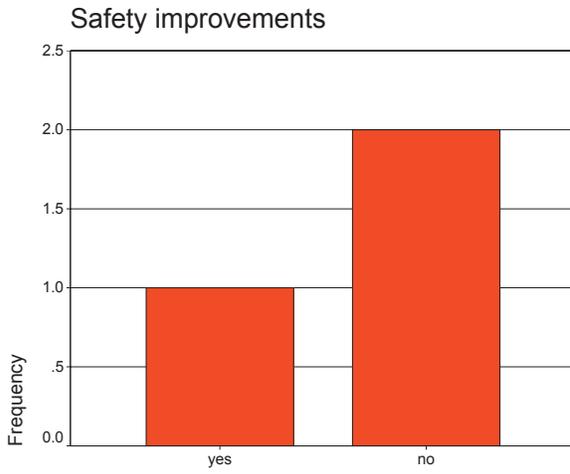
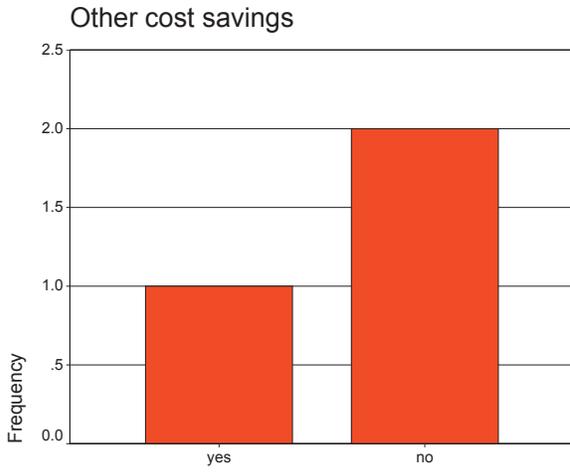
**Q5K Better methods**

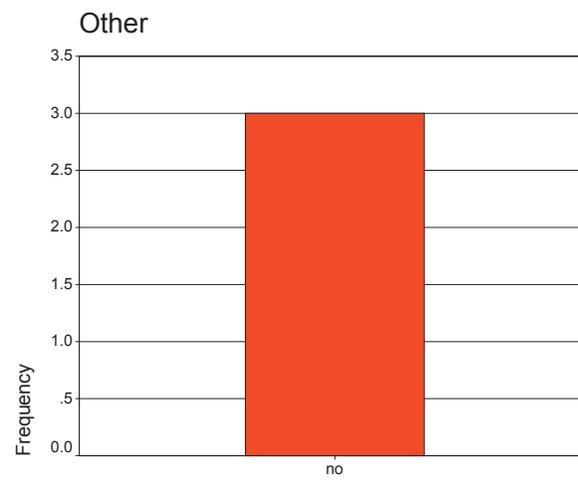
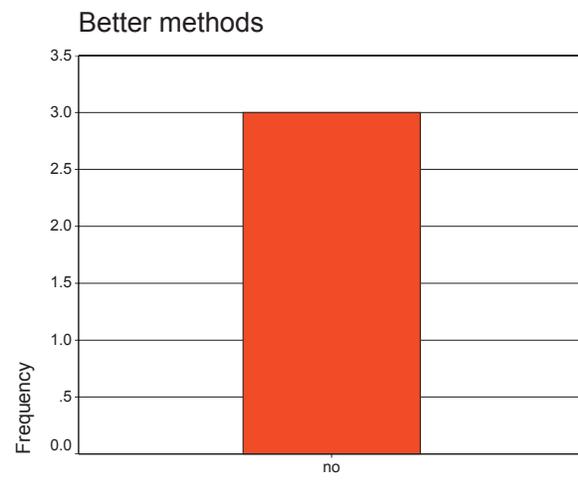
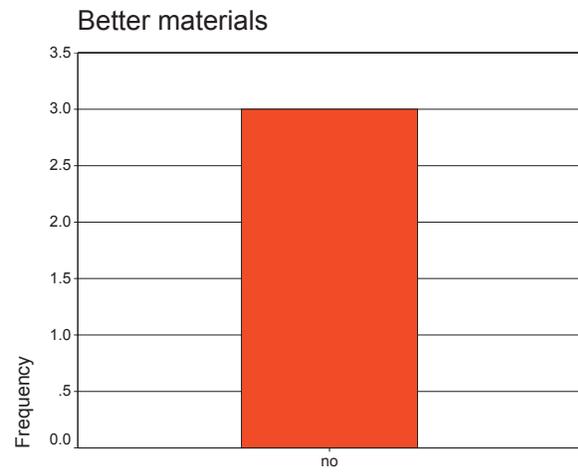
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q5M Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0







**Q6: Have you heard of any of the following specific research projects? If so, please place a check next to those project titles.**

**Q6A SHRP Pavement Project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6B Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q6C Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q6D Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q6E Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

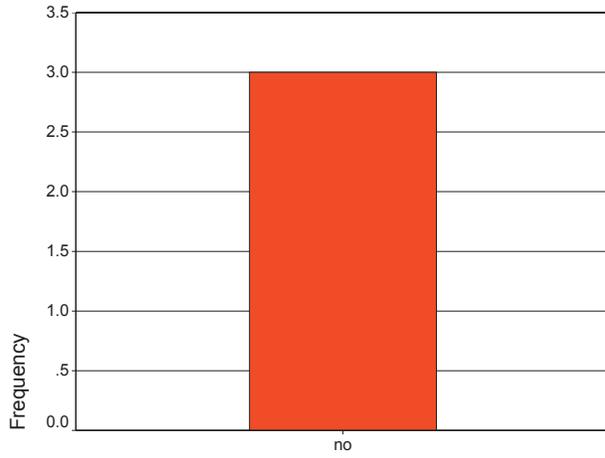
**Q6F Innovative Bridge Design Construction Techniques to Expedite Construction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

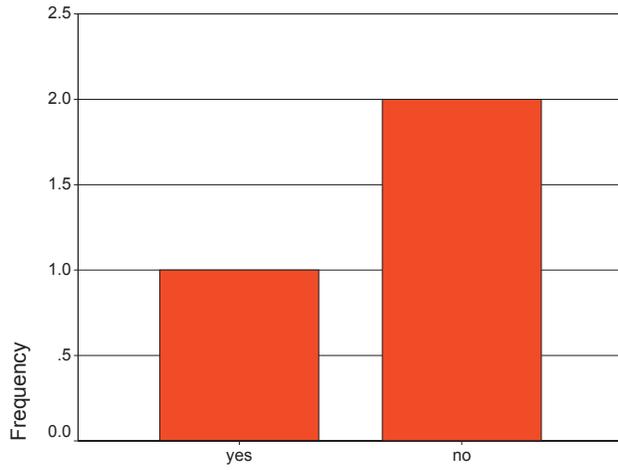
**Q6G Comparison and Definition of State DOT's Practices in Selection of Materials for Pavements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

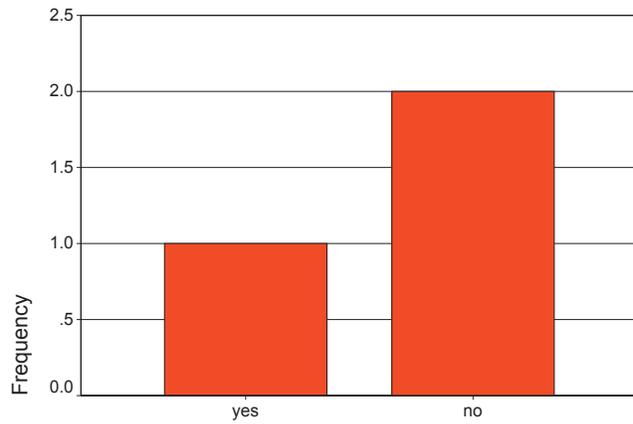
SHRP Pavement Project on Delaware 23



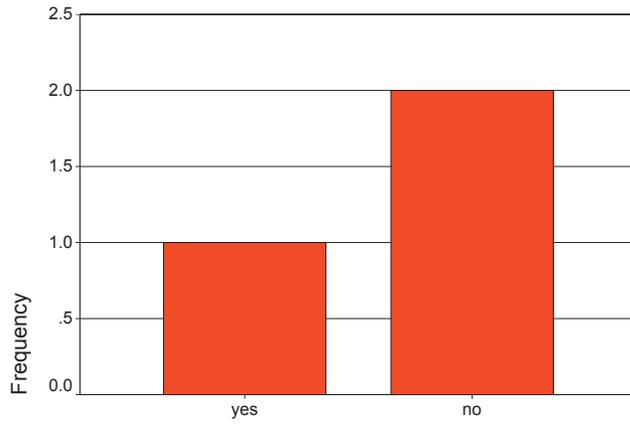
Ohio Freight Study



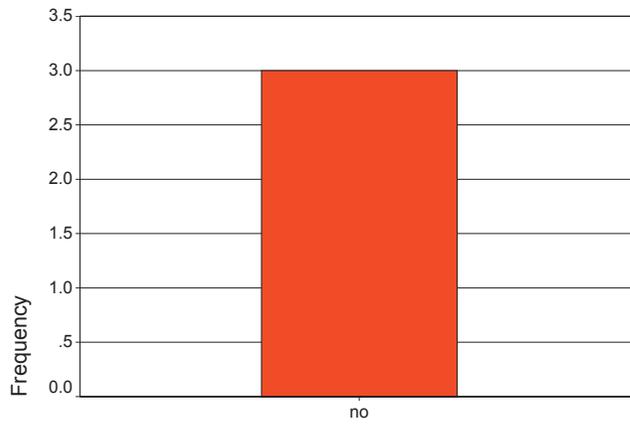
Evaluation of Warranty Provisions  
on ODOT Construction Projects



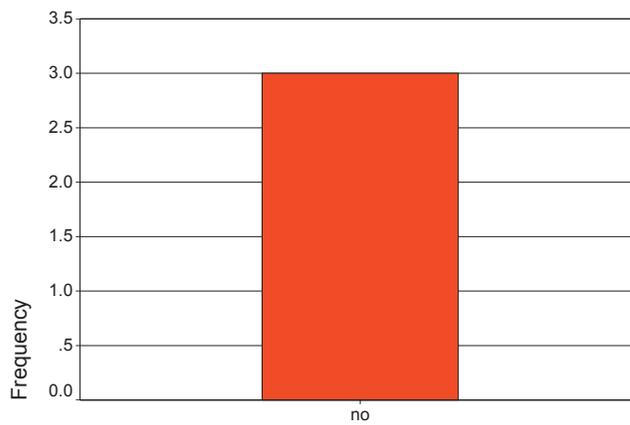
### Evaluation of Drainable Bases Under Asphalt Pavement



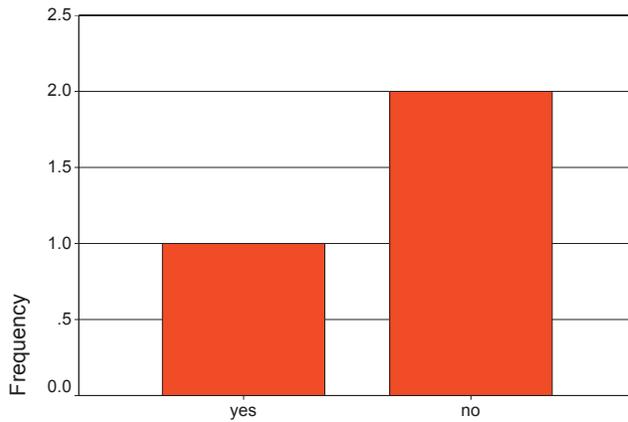
### Development of Crash Reduction Techniques



### Innovative Bridge Design Construction Techniques to Expedite Construction



Comparison and Definition of State DOT's  
Practices in Selection of Materials



**Q6A If so, how did you hear of them?**

**Q6A1 Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A2 Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A3 Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A4 Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A5 Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A6 Conference**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A8 Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q6A9 Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q6A10 Colleague**

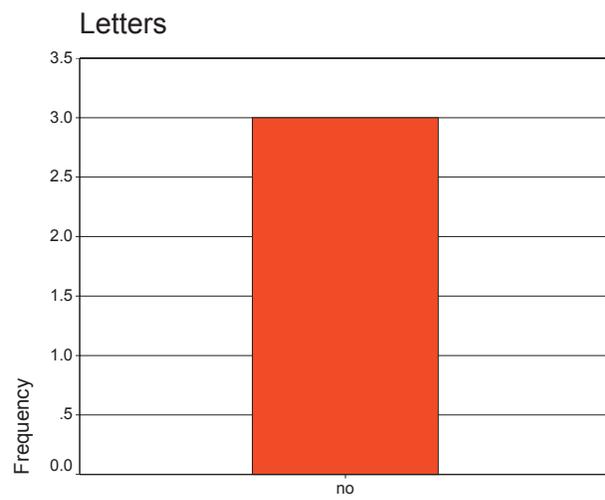
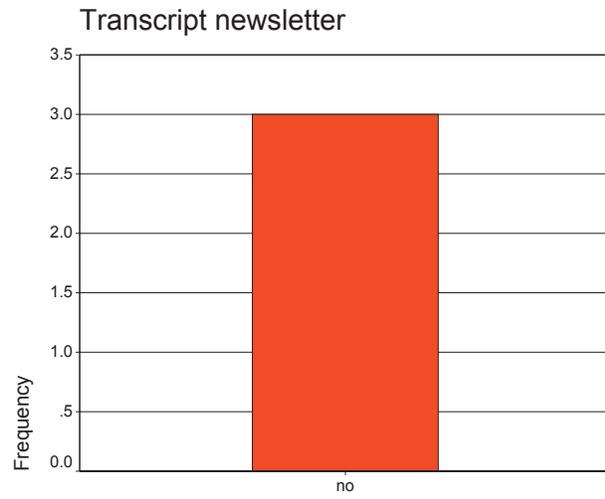
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

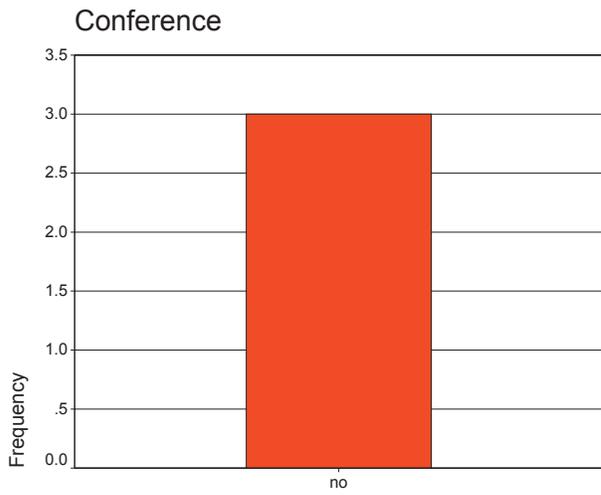
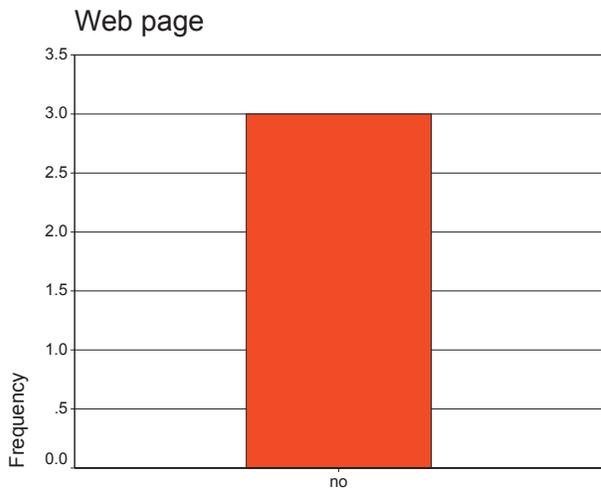
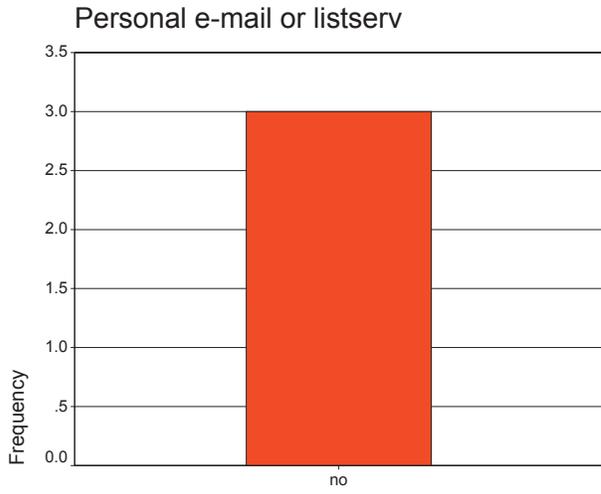
**Q6A11 Other**

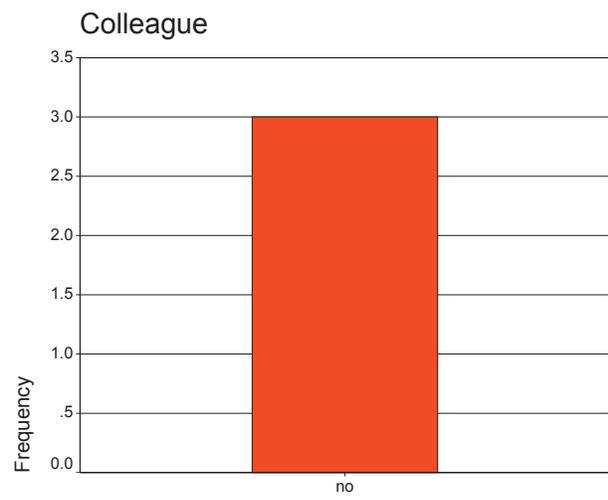
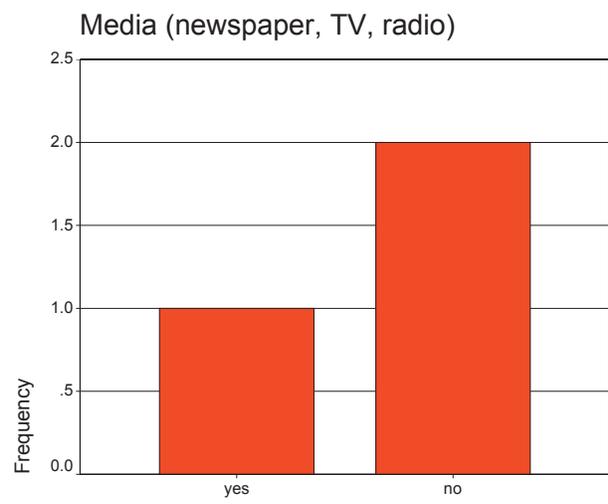
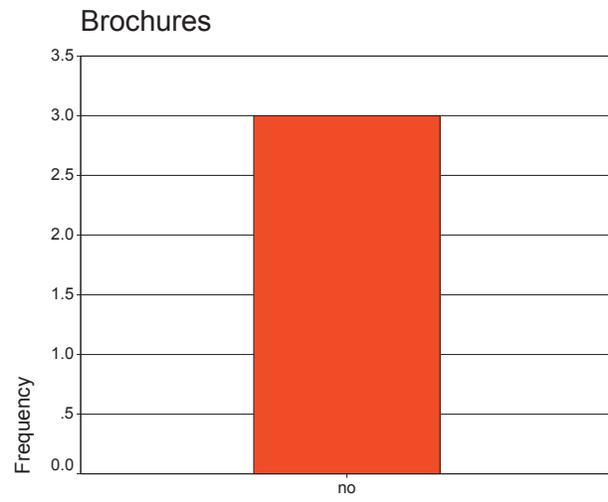
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

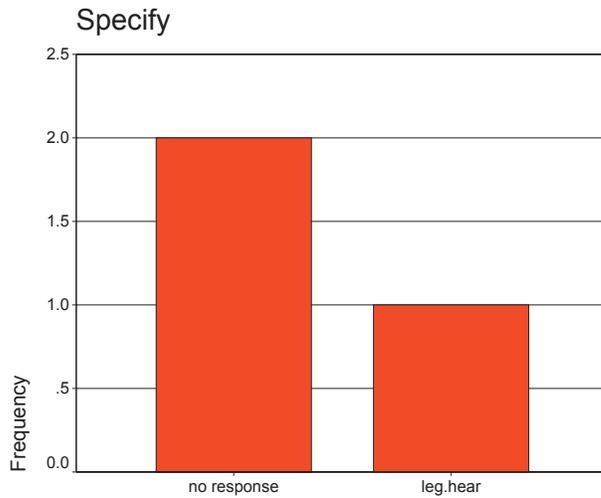
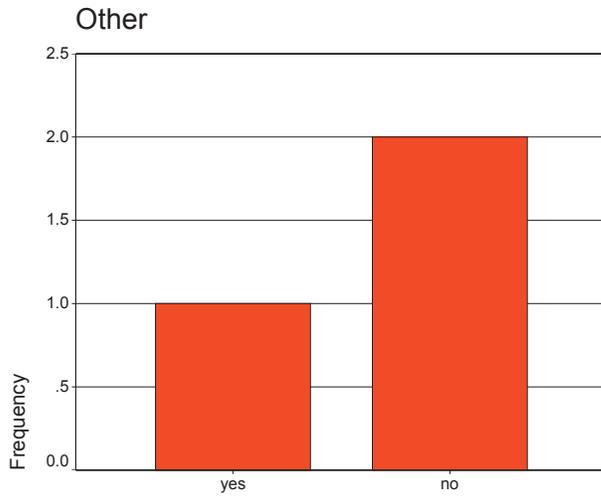
**Q6A12 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
legislative hearing	1	33.3	33.3	100.0
Total	3	100.0	100.0	









**Q7: What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?**

**Q7A Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7B Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7C Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	33.3	33.3
	2 no	2	66.7	66.7	100.0
	Total	3	100.0	100.0	

**Q7D Personal e-mail or listserv**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	66.7	66.7	66.7
	2 no	1	33.3	33.3	100.0
	Total	3	100.0	100.0	

**Q7E Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	33.3	33.3
	2 no	2	66.7	66.7	100.0
	Total	3	100.0	100.0	

**Q7F Conference**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	3	100.0	100.0	100.0

**Q7H Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	3	100.0	100.0	100.0

**Q7I Media (newspaper, TV, radio)**

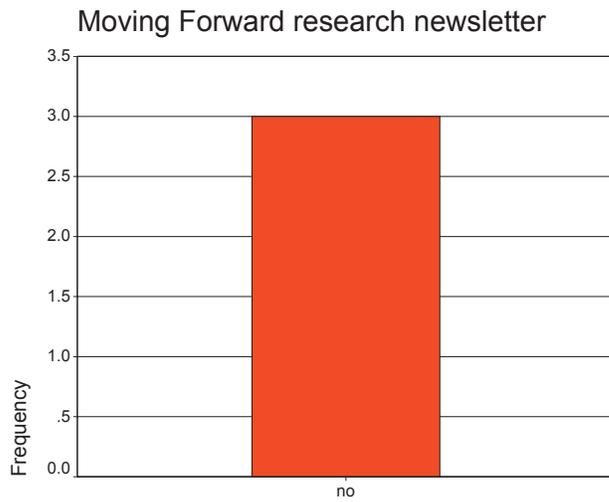
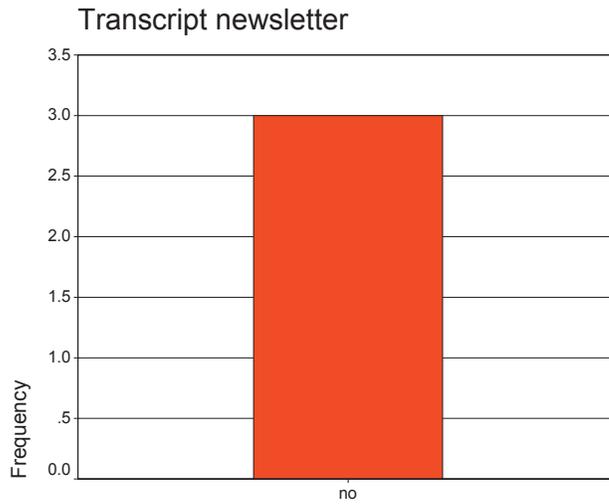
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	33.3	33.3
	2 no	2	66.7	66.7	100.0
	Total	3	100.0	100.0	

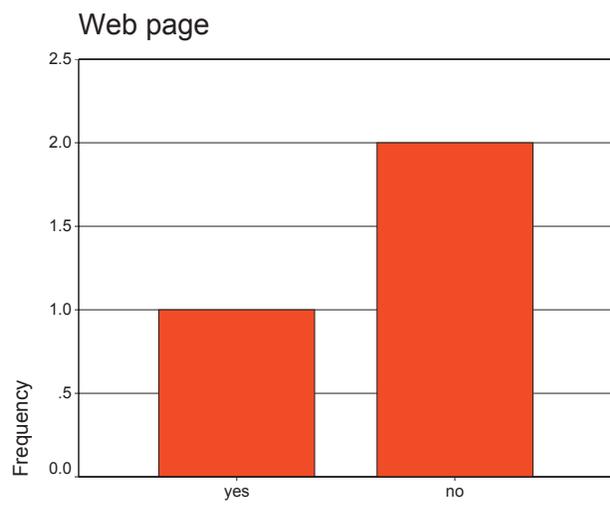
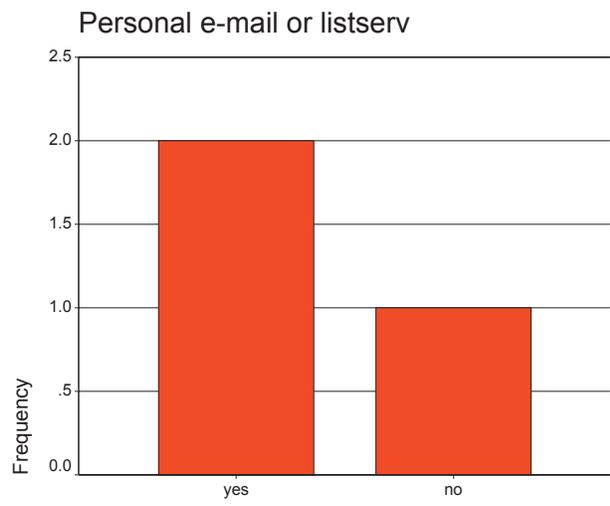
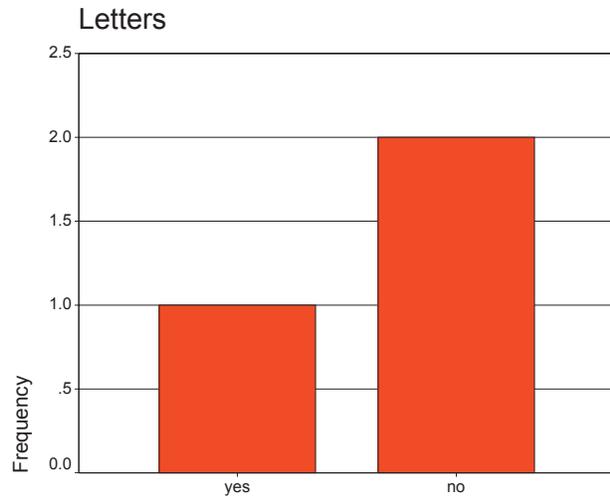
**Q7J Colleague**

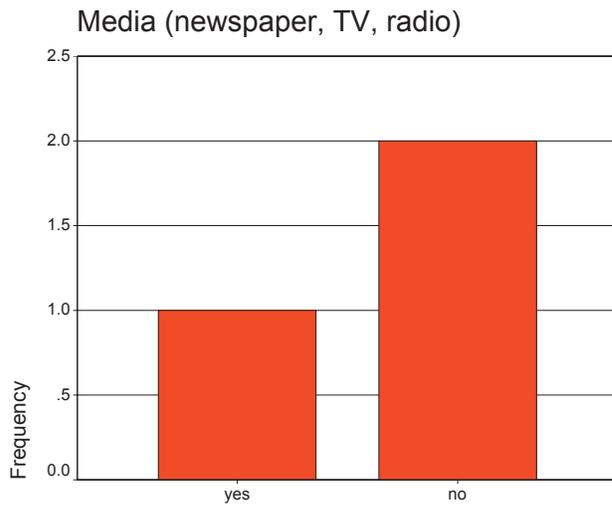
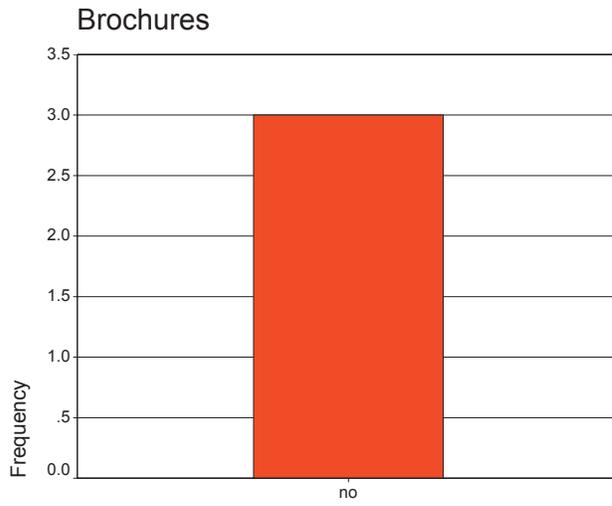
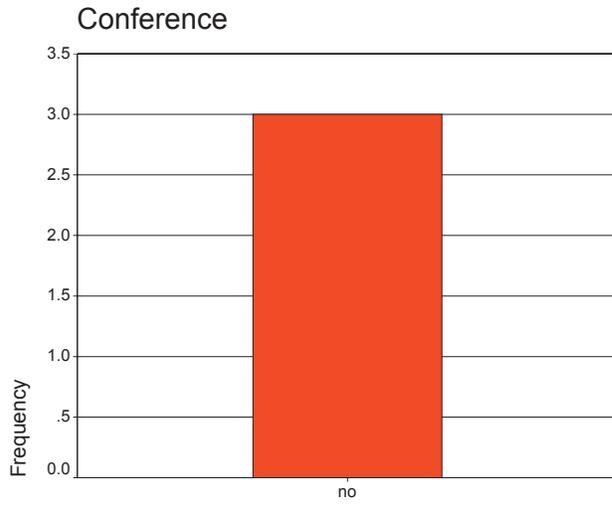
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	66.7	66.7	66.7
	2 no	1	33.3	33.3	100.0
	Total	3	100.0	100.0	

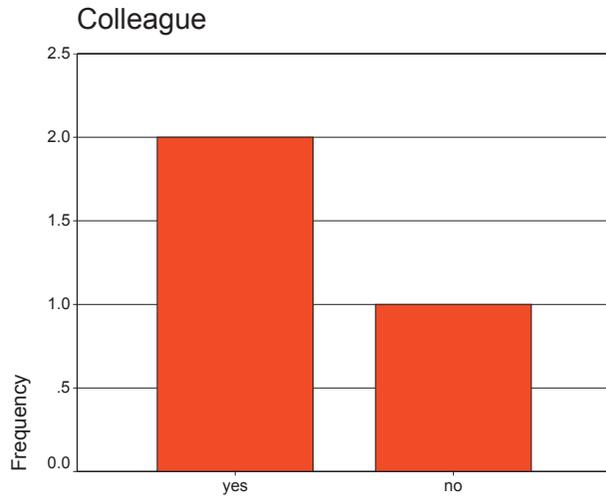
## Q7K Other

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0



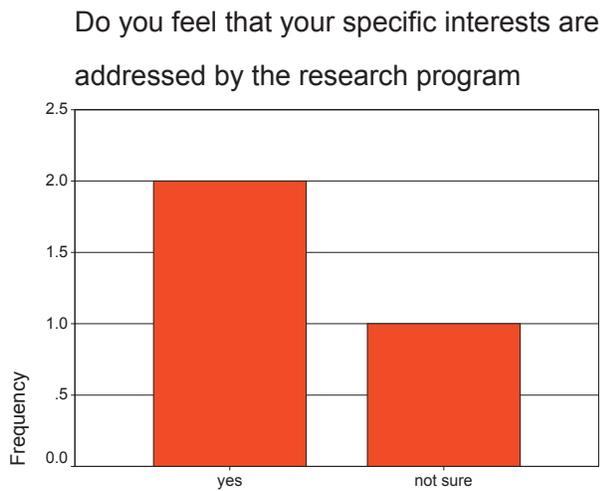






**Q8: Do you feel that your specific interests are addressed by the research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
3 not sure	1	33.3	33.3	100.0
Total	3	100.0	100.0	



**Q9: What types of research activities are you most interested in knowing about? (please check all that apply)**

**Q9A ODOT's success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9B Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	100.0	100.0	100.0

**Q9C Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9D Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q9E Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q9F Strategic research plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q9G Implementation**

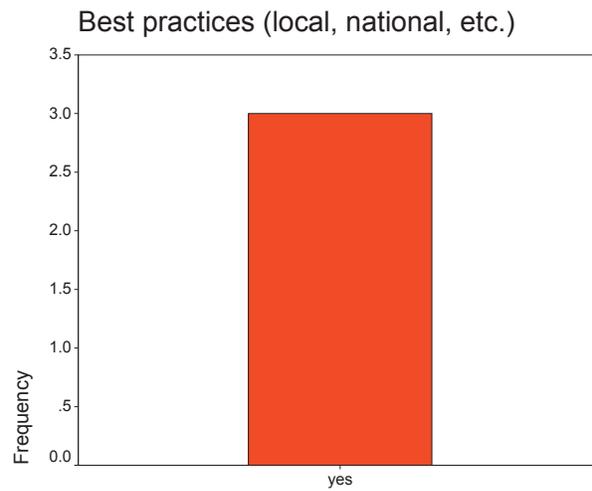
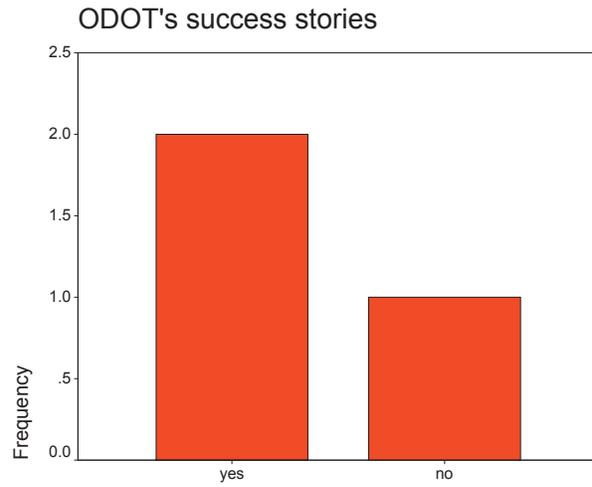
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

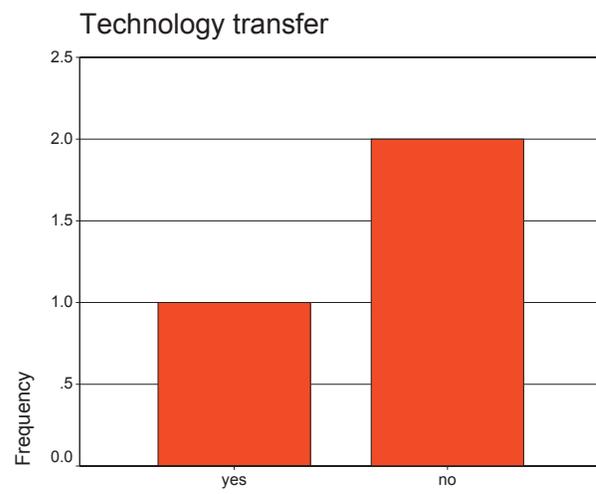
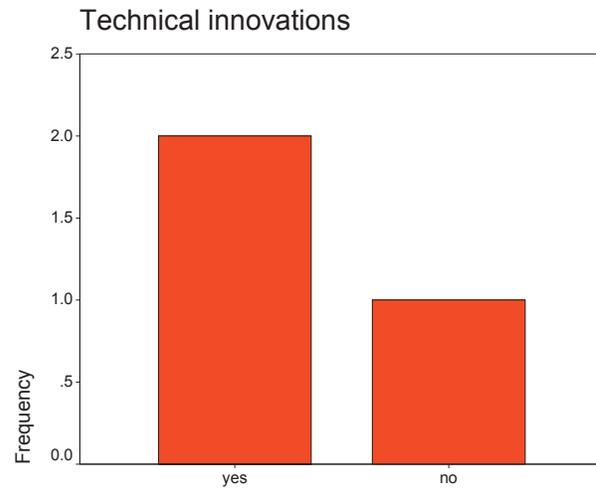
**Q9H Cost-saving measures**

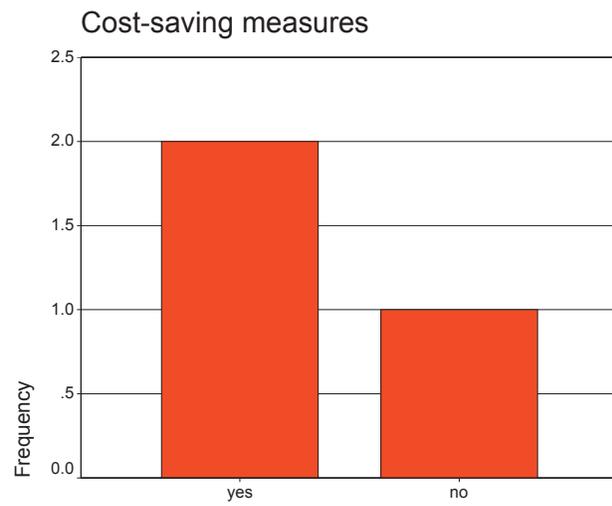
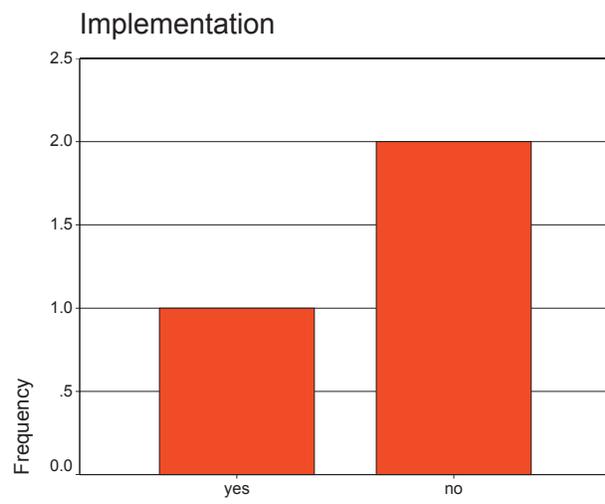
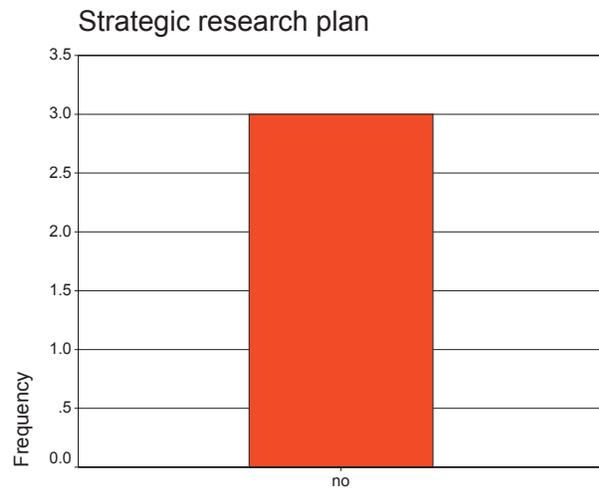
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9I Benchmarking with other states**

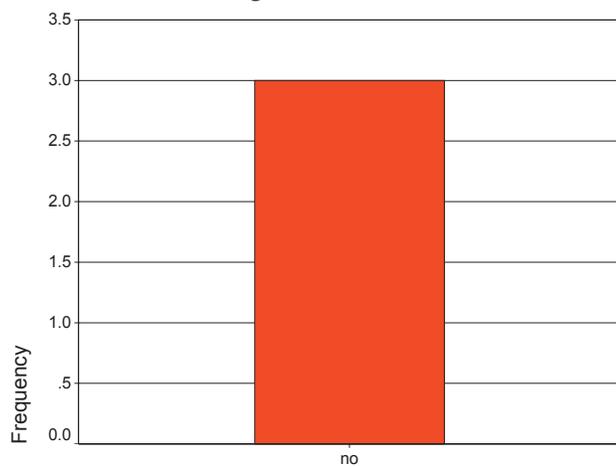
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0







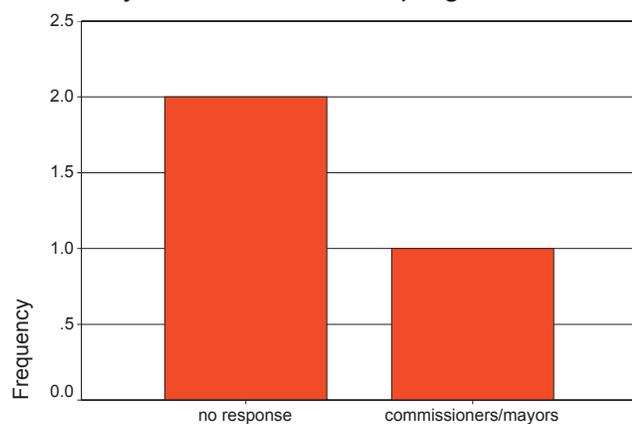
### Benchmarking with other states



**Q10: Finally, please take a moment to consider---and then list---any other of your associates or constituents who might take an interest in or value the products of the research program.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
co.comm., mayors	1	33.3	33.3	100.0
Total	3	100.0	100.0	

### List other associates or constituents who may value the research program



## Appendix C FHWA Reg. Resource Center Survey Results

**Q1: On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in ODOT's research program activities?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4 somewhat	2	66.7	66.7	66.7
5 very interested	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q1A What is the motivation for your interest?**

### Q1A1 Part of my job description

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

### Q1A2 To extend my knowledge of the transportation field

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

### Q1A3 To interact with researchers and engage in different activities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

### Q1A4 To provide solutions to technical problems relating to my work

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q1A5 Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

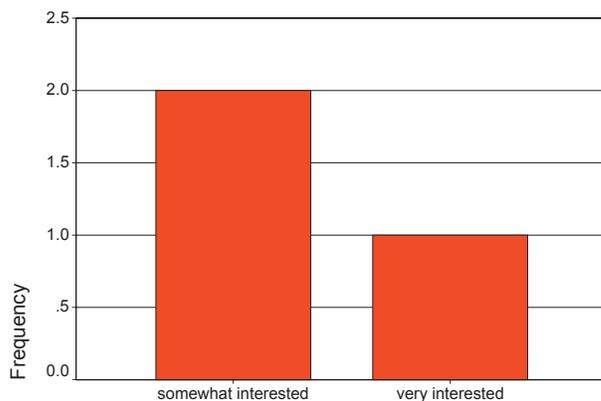
**Q1A6 Specify**

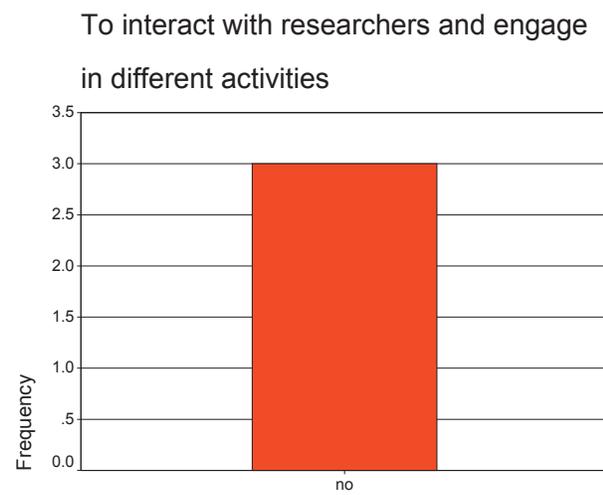
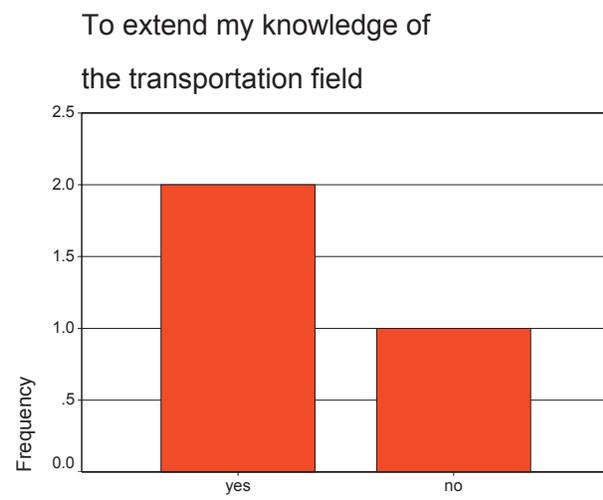
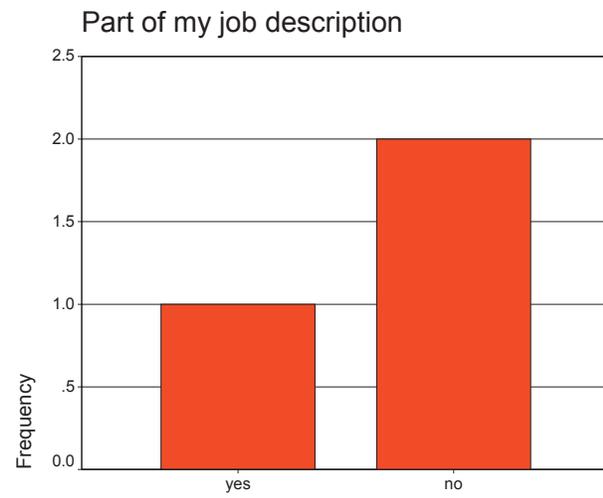
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
to provide info and technical experts	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q1B If you responded with a "4" or "5" to the question above, how has your interest in ODOT's research program improved the efficiency or effectiveness of your job or program?**

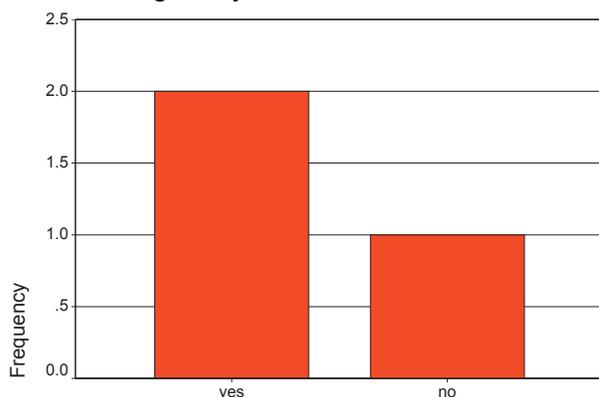
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	33.3	33.3	33.3
Assisted in the delivery of technology and innovations to our customers	1	33.3	33.3	66.7
ODOT's problems are typical of a midwest state's highway transportation problems so there is good transferability of research results	1	33.3	33.3	100.0
Total	3	100.0	100.0	

How interested are you in the activities of ODOT's research program?

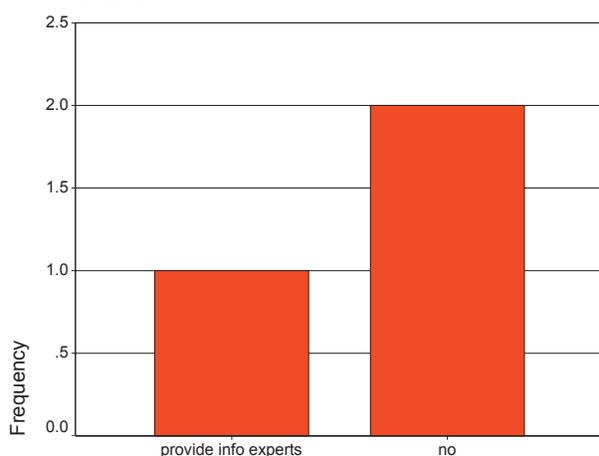




To provide solutions to technical problems relating to my work



Other



**Q2: Regardless of your level of interest or involvement, please rate the following activities you EXPECT from ODOT's research program according to priority. (please rate) 0-not a priority, 1-somewhat a priority, 2-high priority, 3-very high priority.**

**Q2A To solve problems for constituents/trouble-shooting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	1	33.3	33.3	33.3
some priority	1	33.3	33.3	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2B To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no response	1	33.3	33.3	33.3
not a priority	1	33.3	33.3	66.7
some priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2C To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid some priority	2	66.7	66.7	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2D To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no response	2	66.7	66.7	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q2E To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no response	1	33.3	33.3	33.3
some priority	1	33.3	33.3	66.7
high priority	1	33.3	33.3	100.0
Total	3	100.0	100.0	

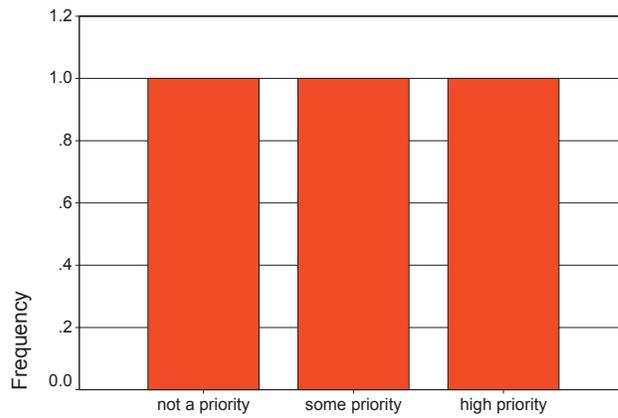
**Q2F Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	1	33.3	100.0	100.0
Missing System	2	66.7		
Total	3	100.0		

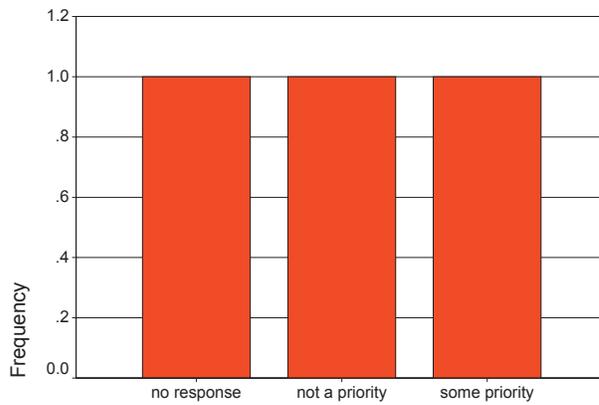
**Q2G Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
Share research results with other state DOTs	1	33.3	33.3	100.0
Total	3	100.0	100.0	

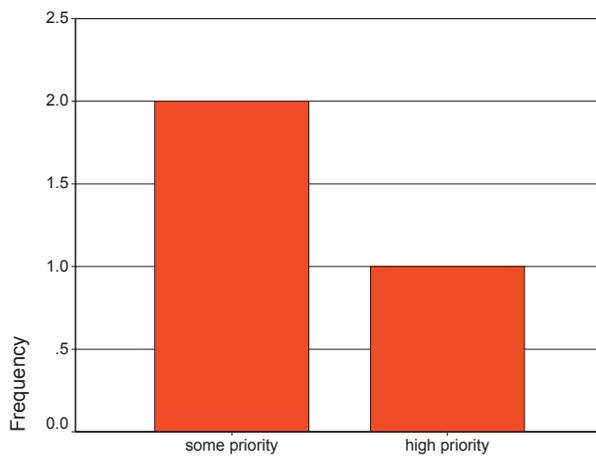
To solve problems for constituents/  
trouble-shooting



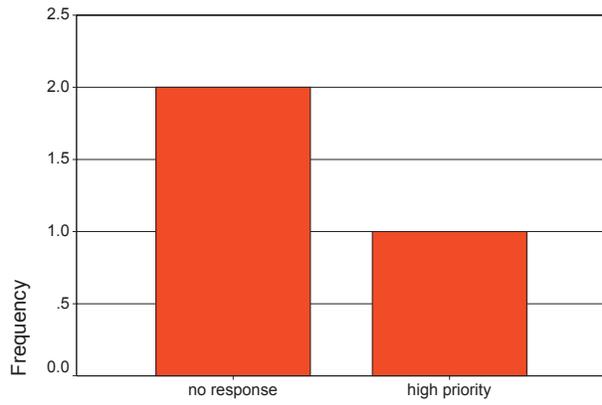
To attain national recognition  
for Ohio and ODOT



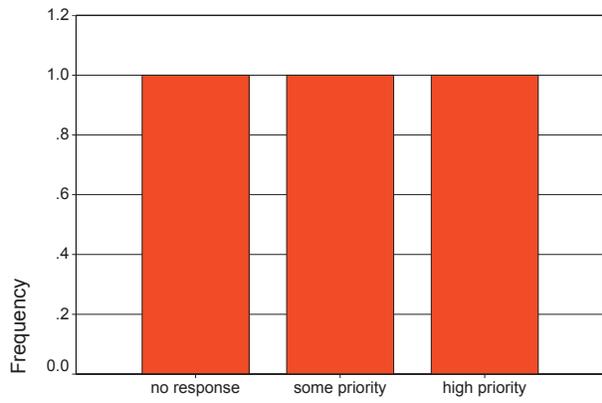
To serve as a technical resource



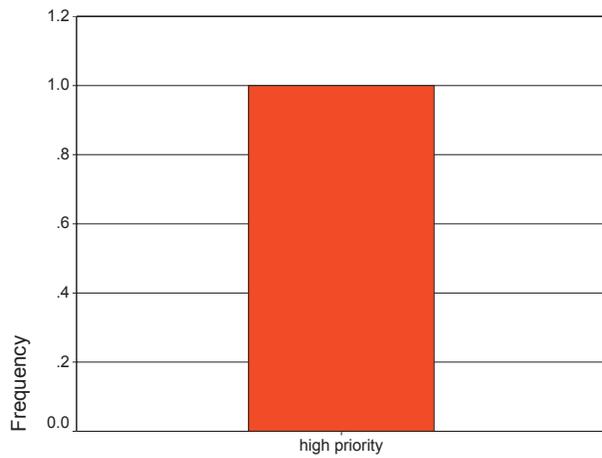
### To seek out or propose ways to improve ODOT activities



### To compile best practices from peers and other organizations



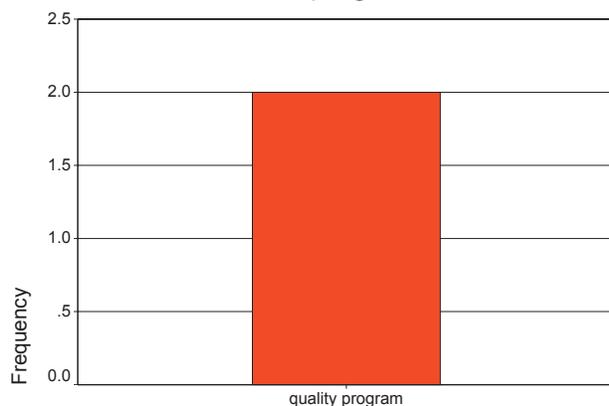
### Other



**Q3: On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT's research program relative to other states in your region?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4 Quality	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

Your impression (1-5) of the quality of  
ODOT's research program



**Q4: How do you learn of ODOT research program projects or activities? (please note all that apply)**

**Q4A Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4B Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4B1 Memoranda / Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4C Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4D Personal e-mails or listservs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4E Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4F Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	50.0	50.0
	2 no	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	System	1	33.3		
Total		3	100.0		

**Q4G Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	66.7	66.7	66.7
	OPEC	1	33.3	33.3	100.0
Total		3	100.0	100.0	

**Q4H Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4I Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4J Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q4K Colleague**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	1	33.3	50.0	50.0
	2 no	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	System	1	33.3		
Total		3	100.0		

**Q4L Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	66.7	66.7	66.7
	Peer in Resource Center at Olympia Field	1	33.3	33.3	100.0
Total		3	100.0	100.0	

**Q4M Researchers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 no	2	66.7	100.0	100.0
Missing	System	1	33.3		
Total		3	100.0		

**Q4N Specify**

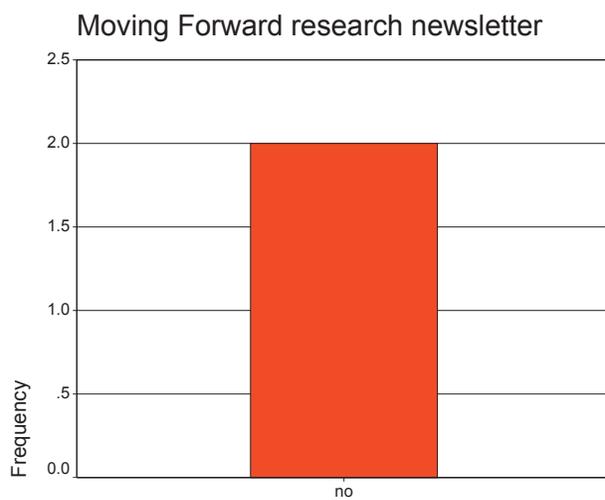
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

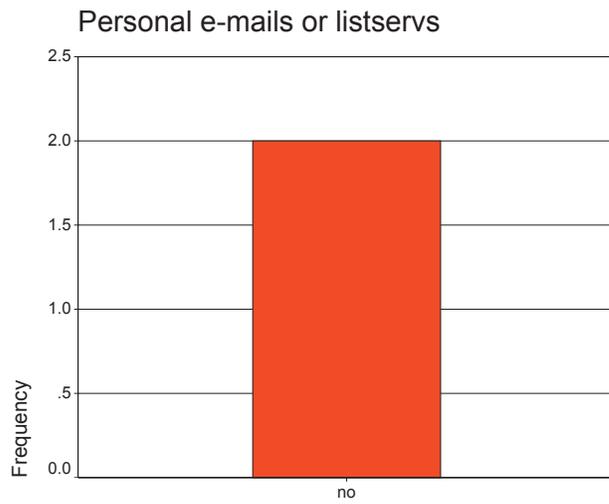
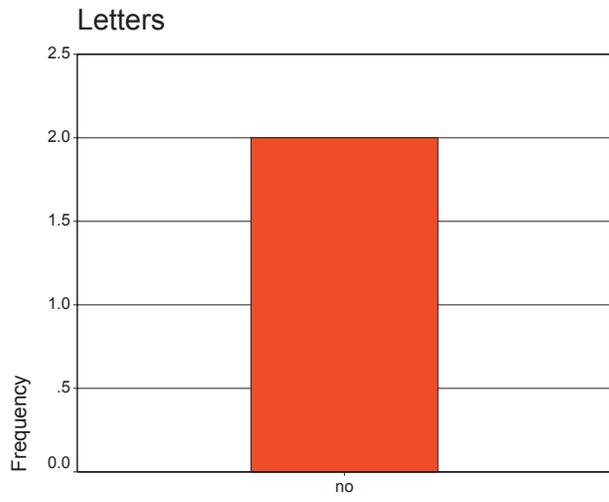
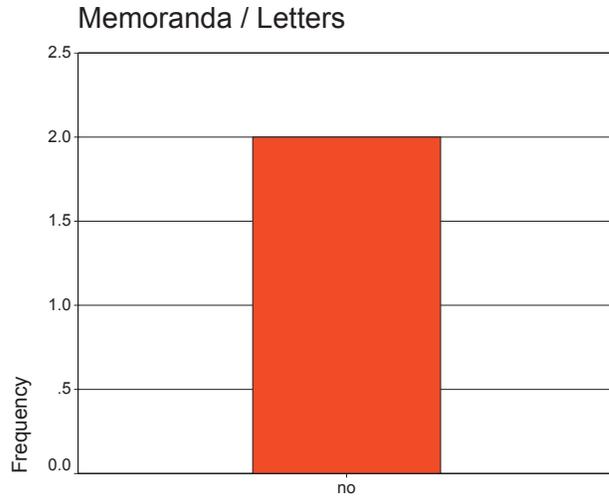
**Q4O Other**

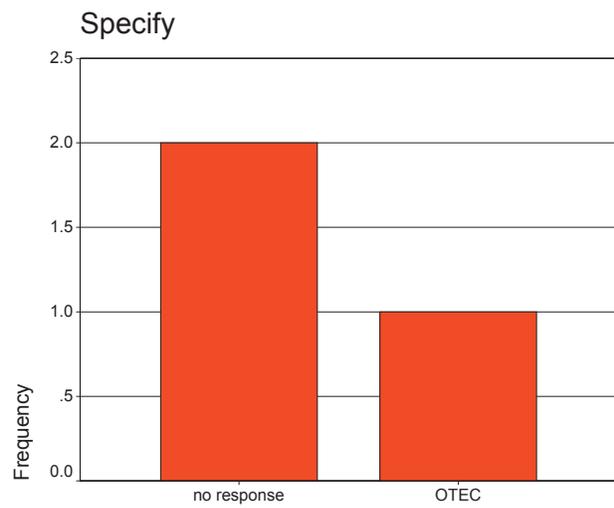
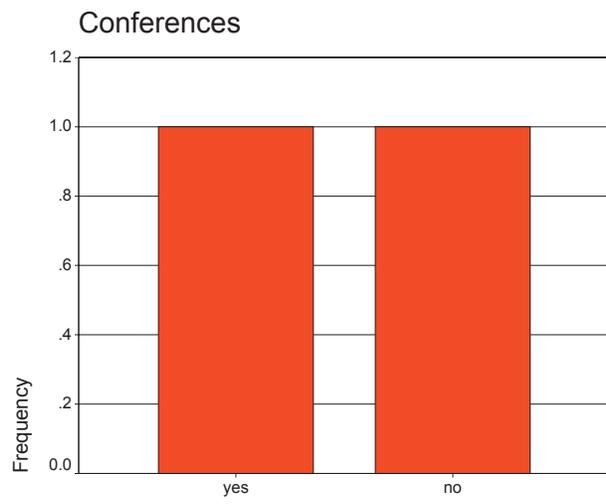
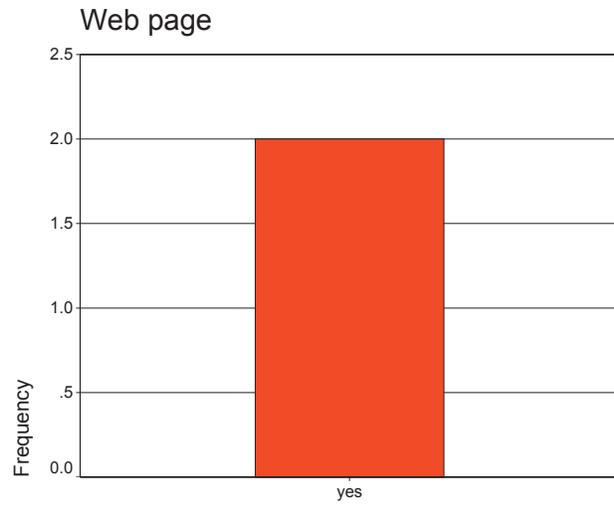
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	2	66.7	100.0	100.0
Missing System	1	33.3		
Total	3	100.0		

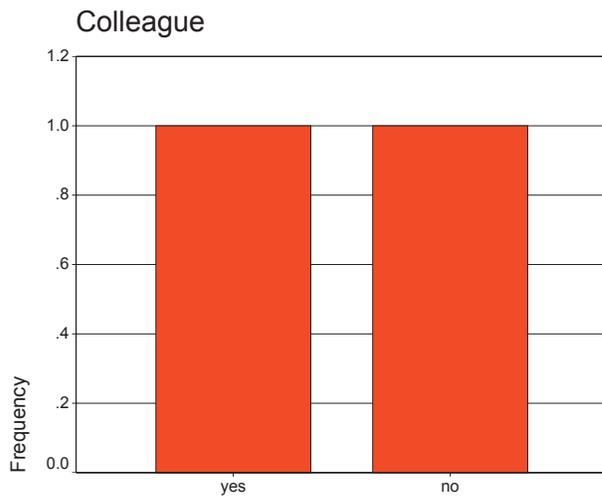
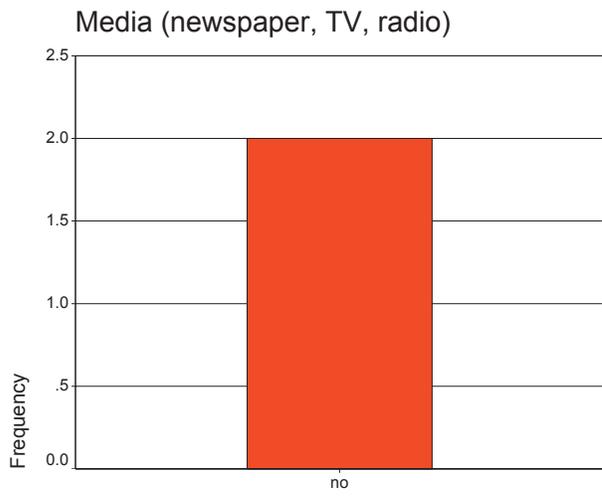
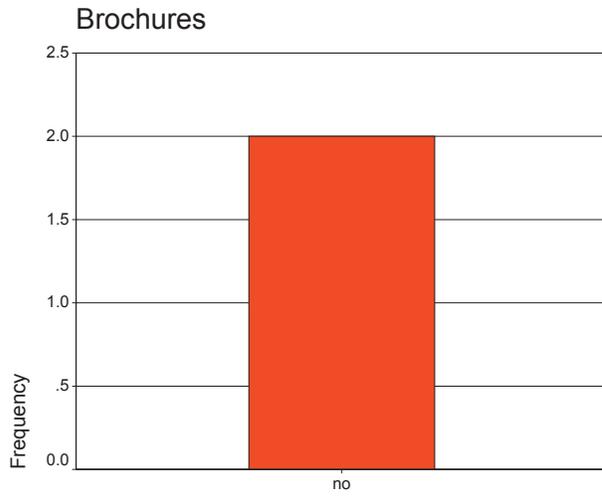
**Q4P Specify**

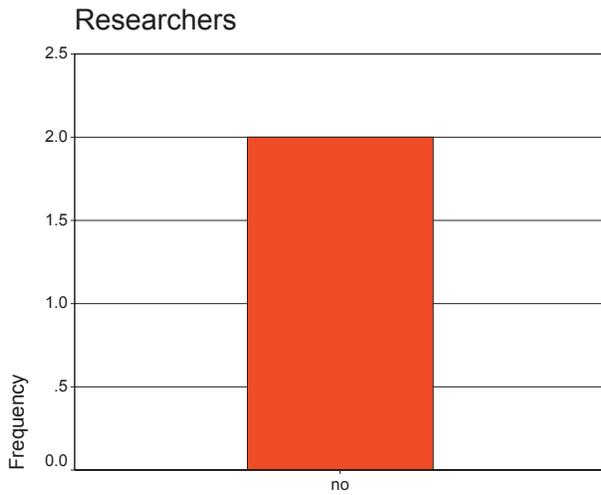
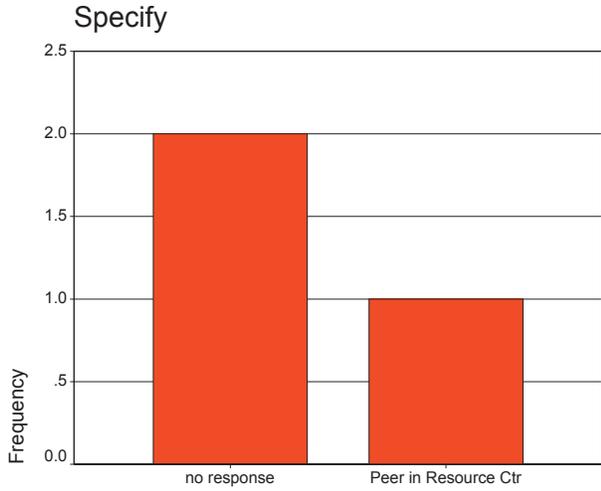
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0







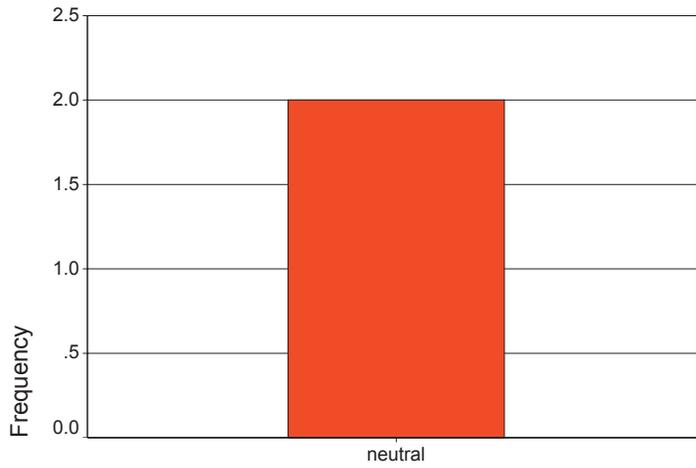




**Q5: On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program relative to other state programs in your region?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid neutral	2	66.7	100.0	100.0
Missing System	1	33.3		
Total	3	100.0		

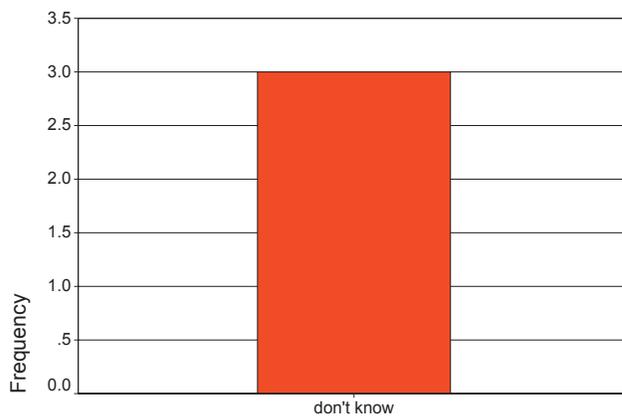
What's your impression of ODOT's communication on its research program?



**Q6: Do you find ODOT's Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4 don't know	3	100.0	100.0	100.0

Do you find ODOT's Research Office to be accessible?



**Q7: Are you aware of any research program activities that resulted in the following? (check all that apply)**

**Q7A Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7B Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q7C Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7D Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q7E Safety improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7F Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q7G Quality improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q7H Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
Deleware, OH, project	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q7I Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7J Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

**Q7K Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7L Specify**

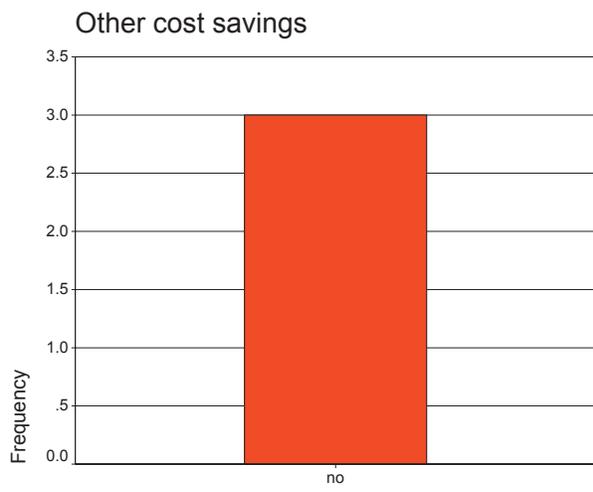
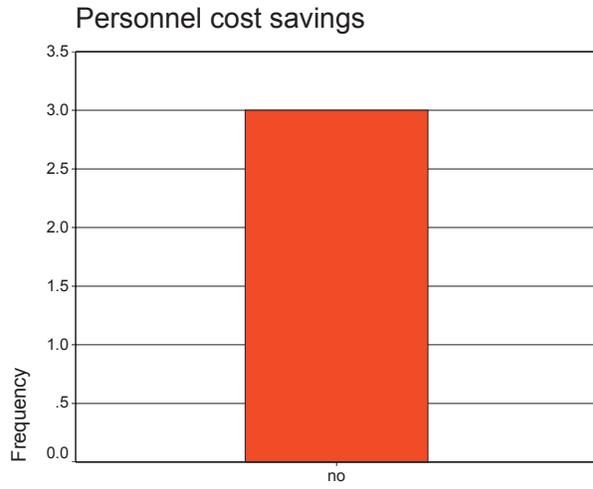
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

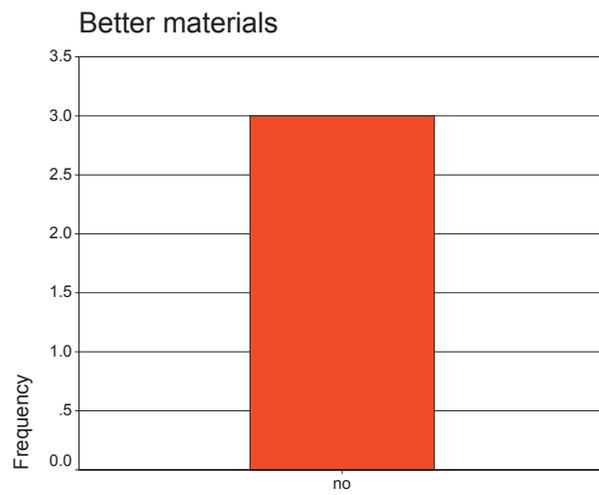
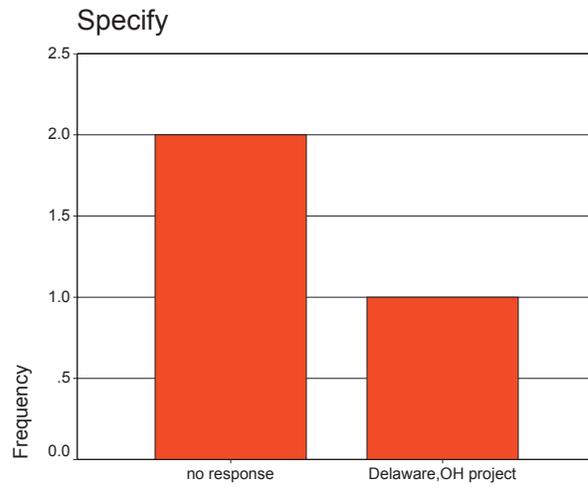
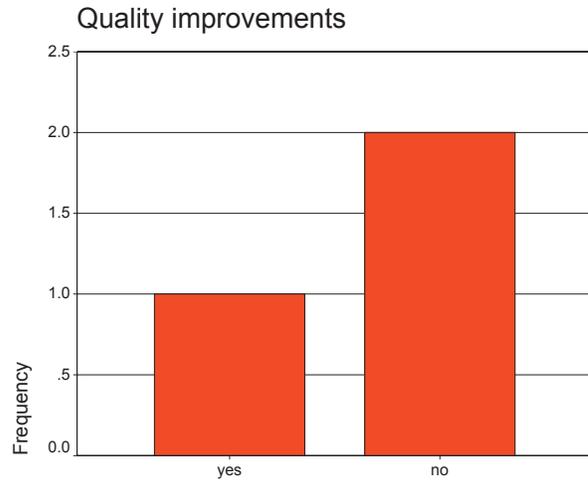
**Q7M Other**

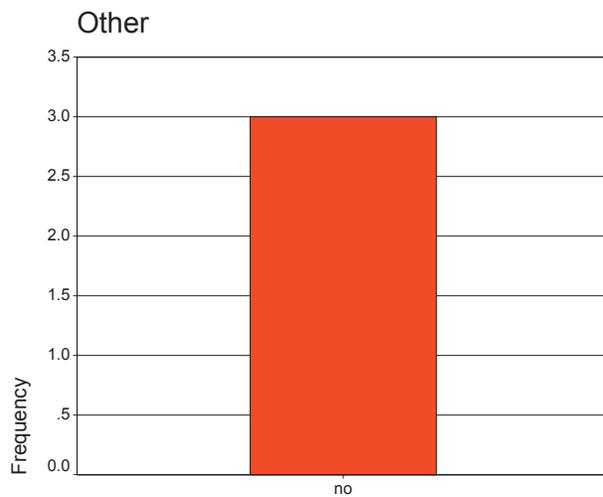
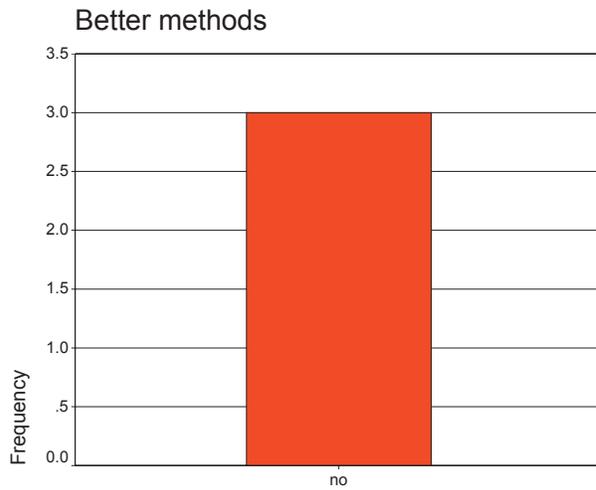
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q7N Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0







**Q8: Have you heard of any of the following research projects?**

**Q8A SHRP Pavement Project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q8B Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8C Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8D Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q8E Development of Crash Reduction Techniques**

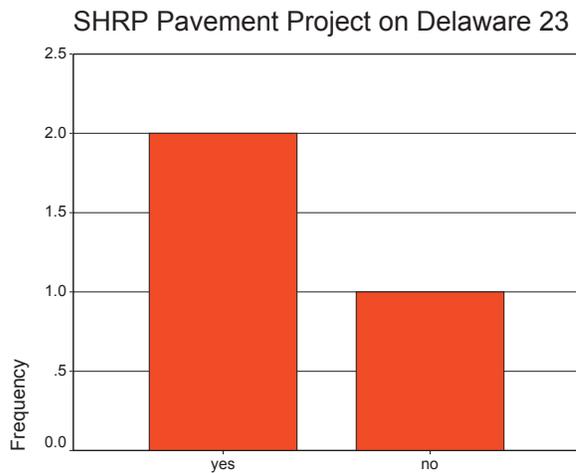
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

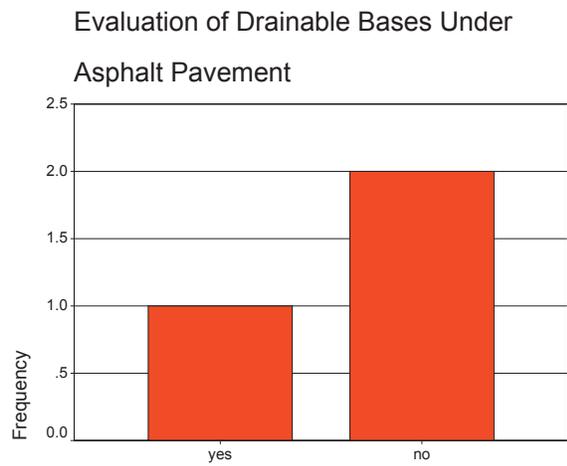
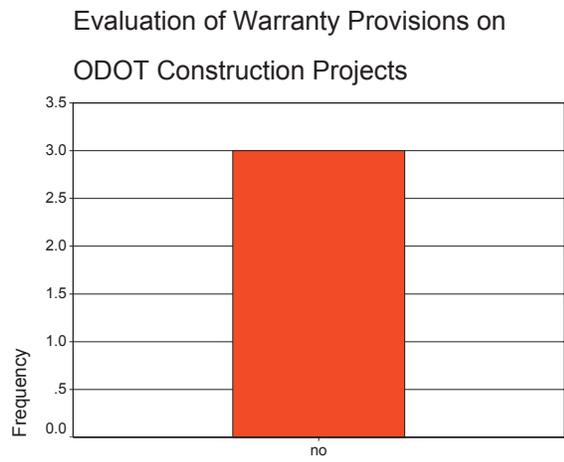
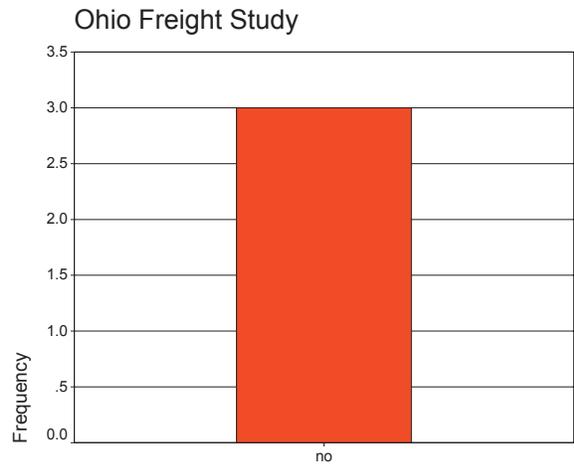
**Q8F Innovative Bridge Design Construction Techniques to Expedite Construction**

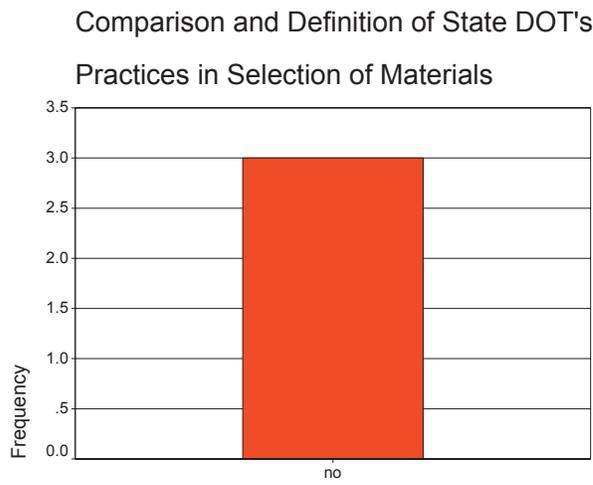
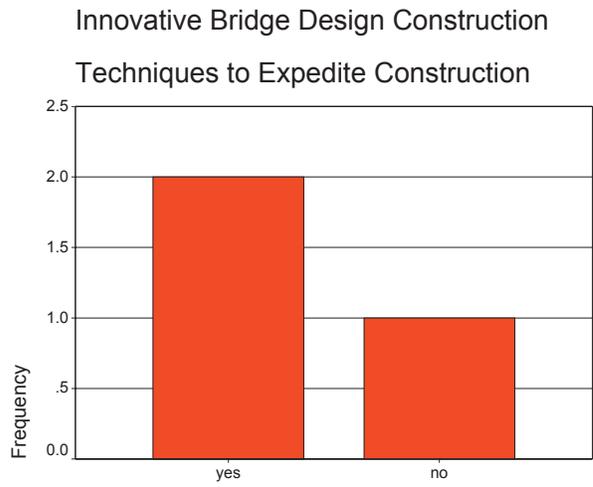
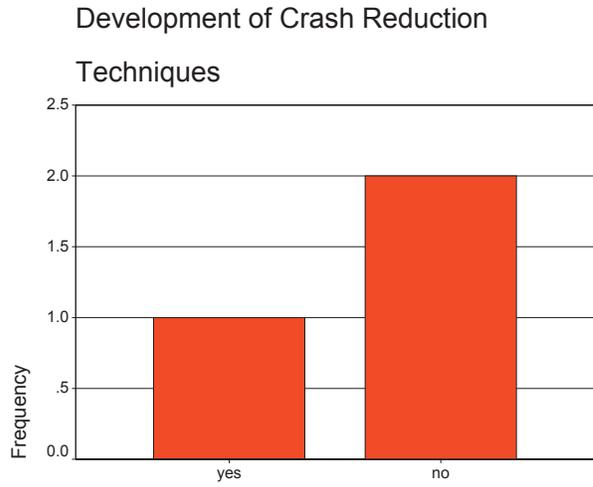
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q8G Comparison and Definition of State DOT's Practices in Selection of Materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0







**Q8a: If so, how did you hear of them?****Q8A1 Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A2 Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A22 DOT Secretary**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A3 Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A4 Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A5 Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A6 Conference**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q8A7 Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
SHRP Conference	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q8A8 Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A9 Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q8A10 Colleague**

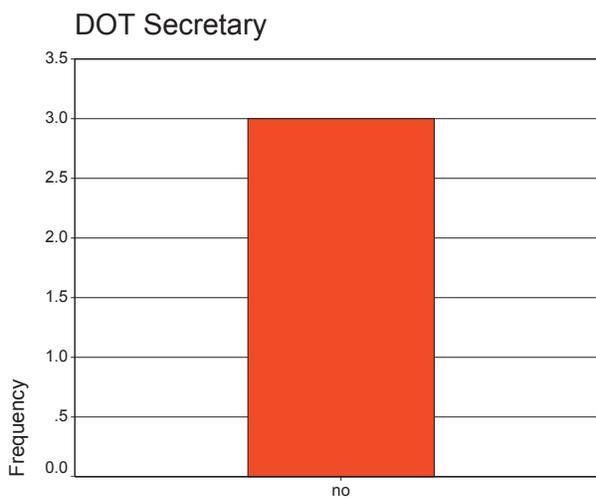
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

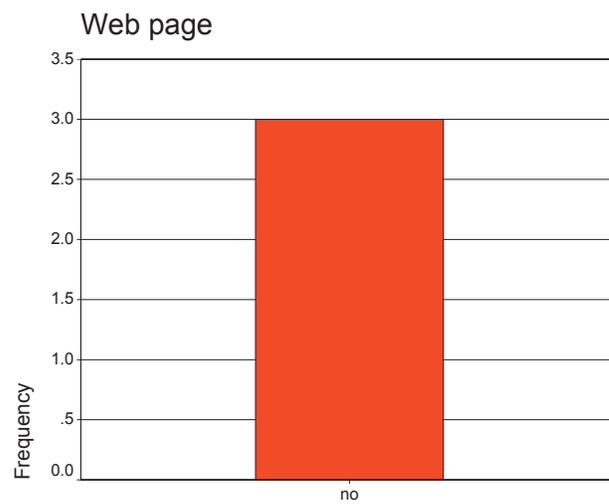
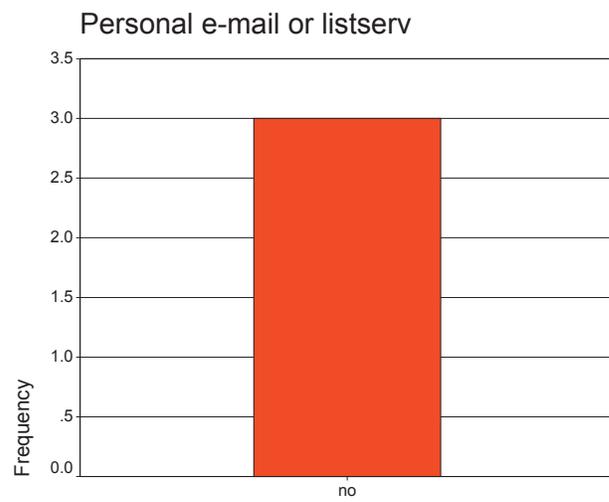
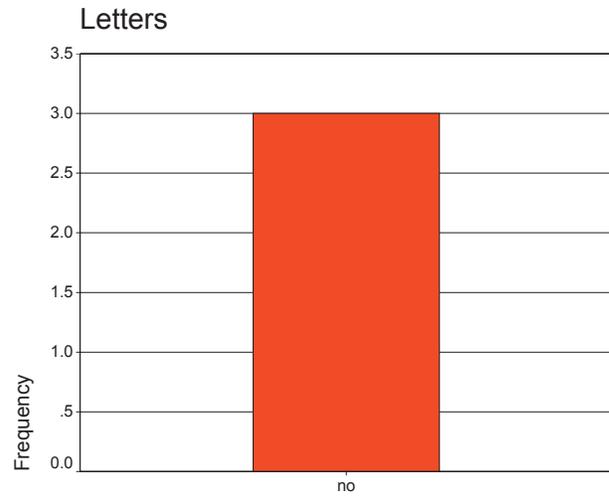
**Q8A11 Other**

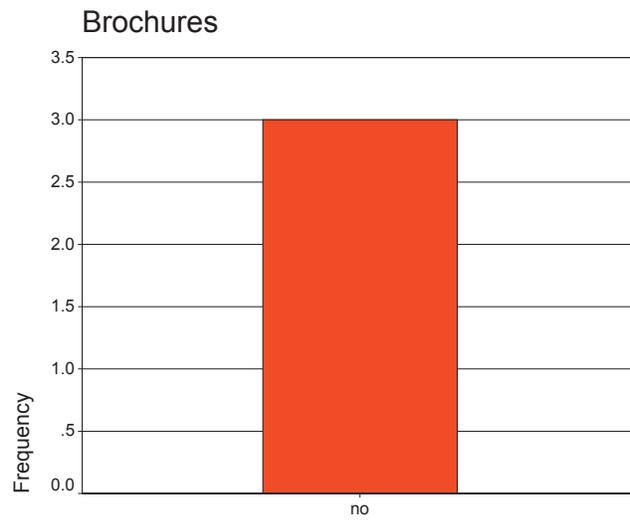
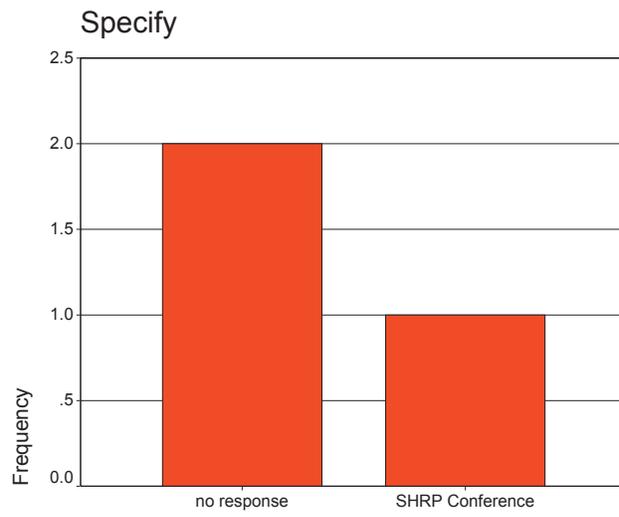
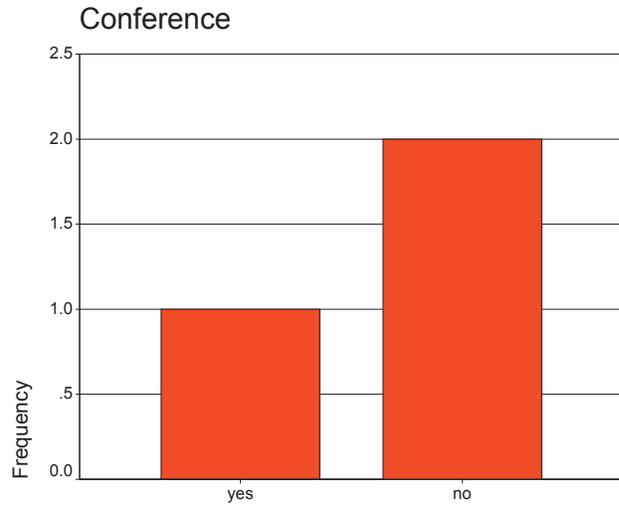
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	2	66.7	100.0	100.0
Missing System	1	33.3		
Total	3	100.0		

**Q8A12 Specify**

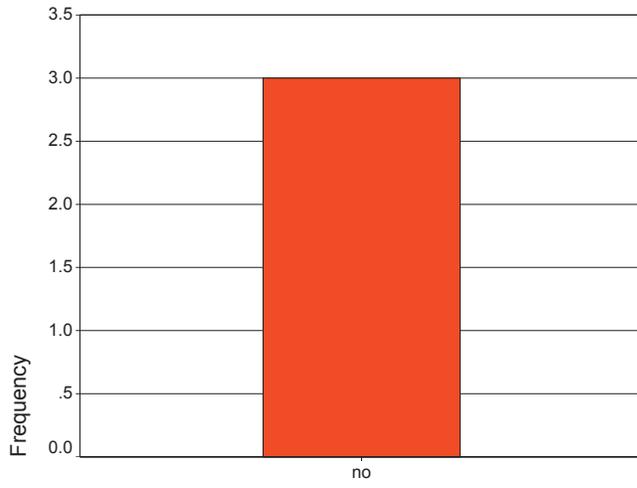
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0



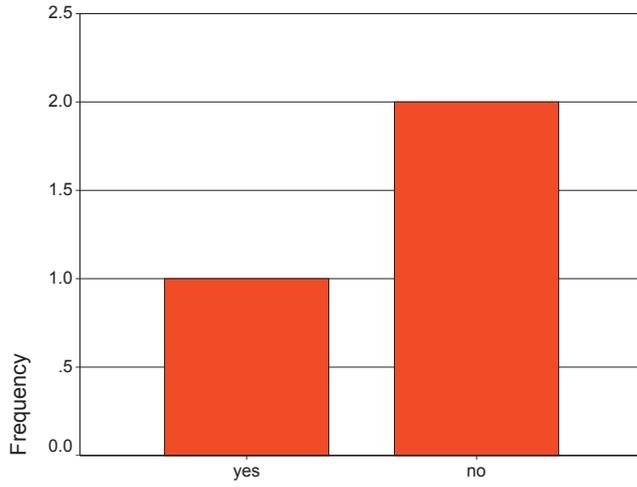




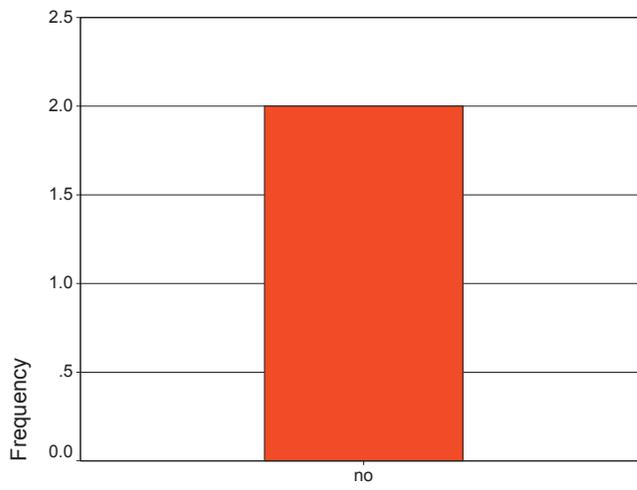
Media (newspaper, TV, radio)



Colleague



Other



**Q9: What is your preferred source of information about the research program? That is, how could ODOT's Research Office best keep in touch with you?**

**Q9A Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q9B Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9C IOCs / Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q9D Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q9E Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9F Conference**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q9G Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	66.7	66.7	66.7
OTEC	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q9H Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q9I Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q9J Colleague**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

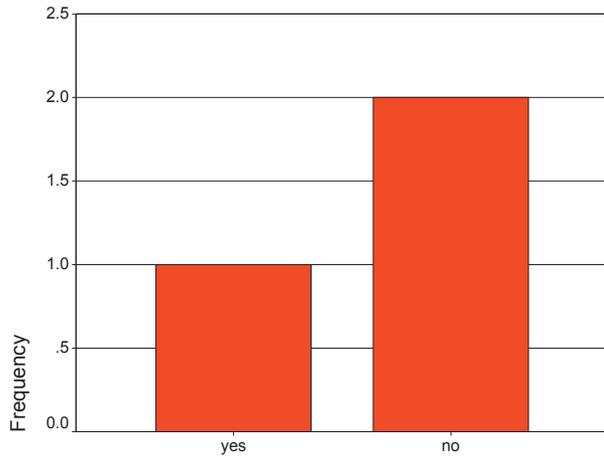
**Q9K Other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

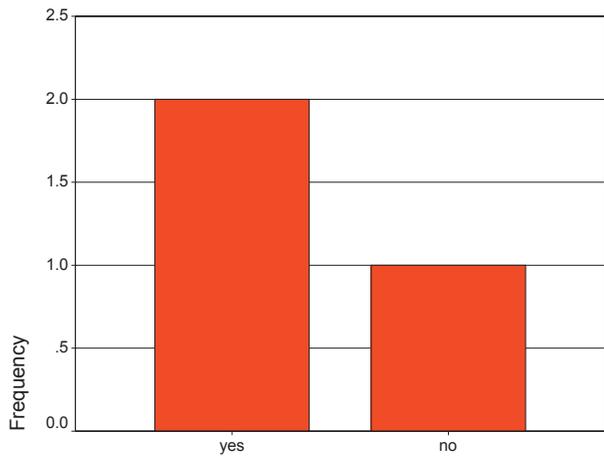
**Q9L Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	100.0	100.0	100.0

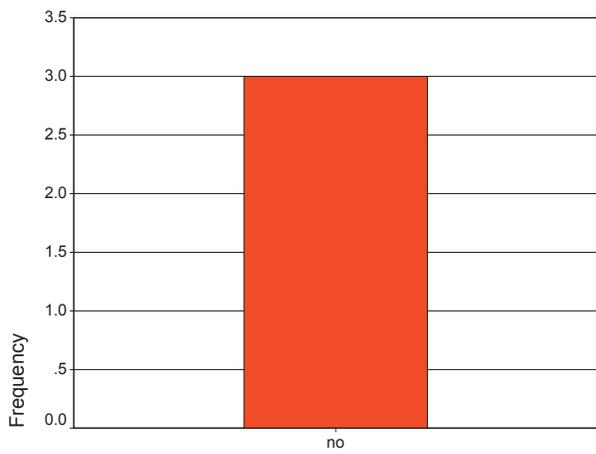
Transcript newsletter

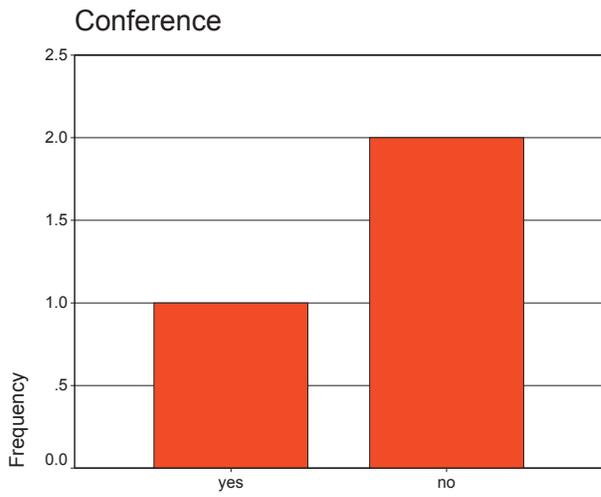
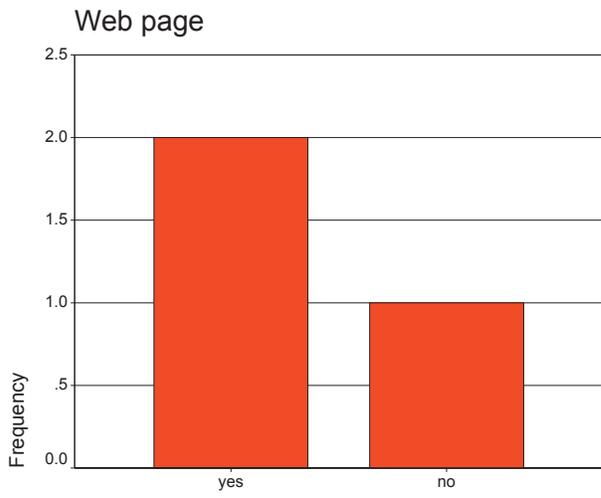
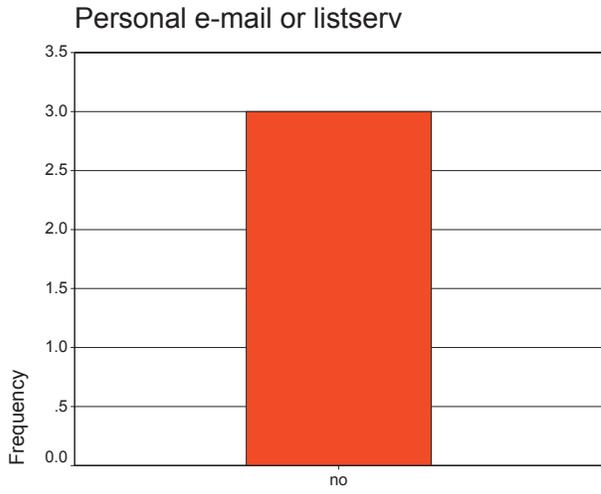


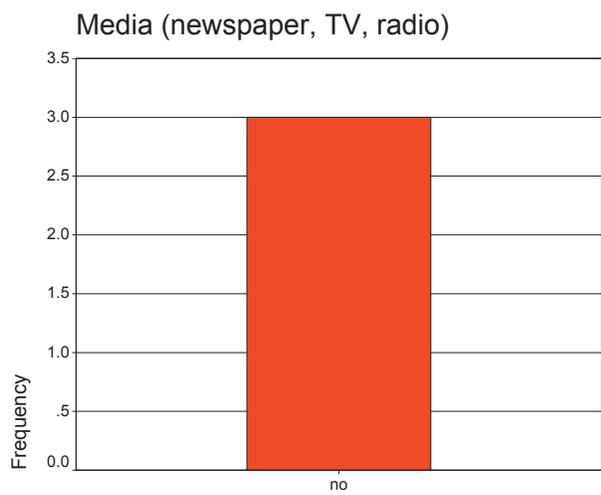
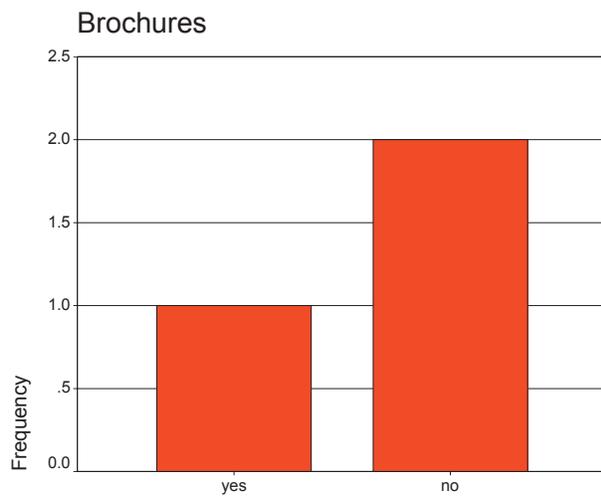
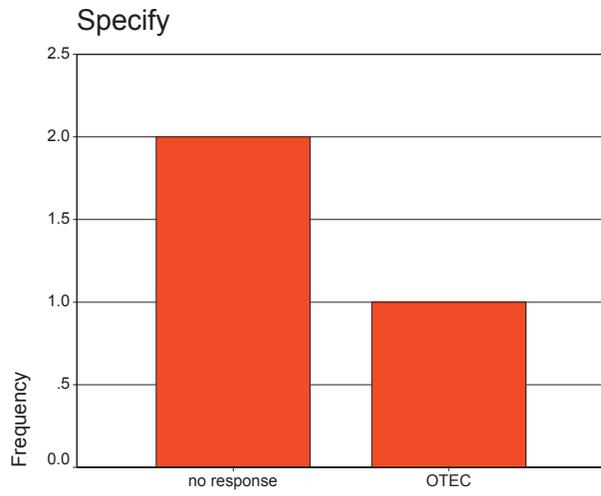
Moving Forward research newsletter

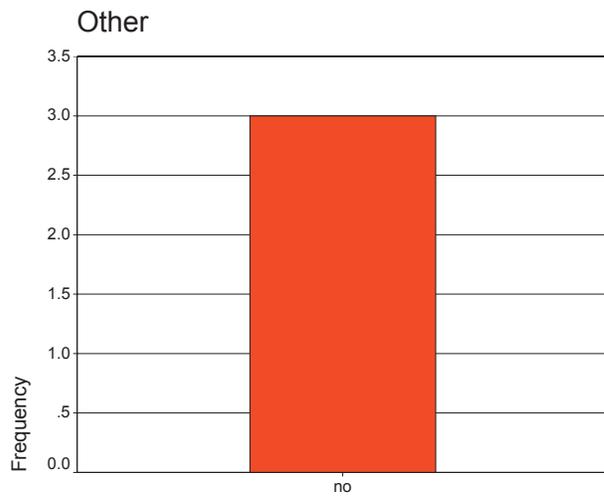
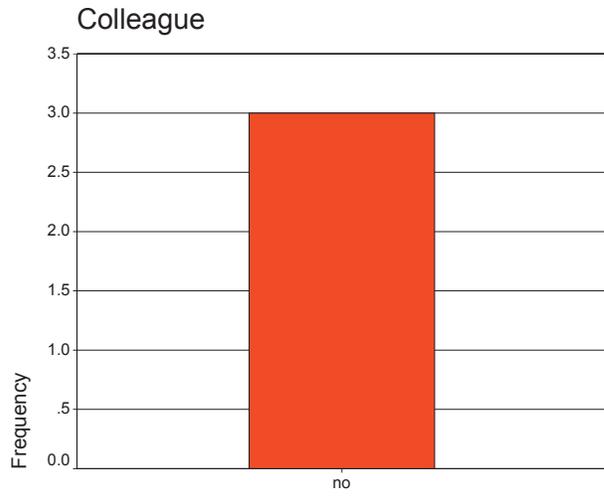


IOCs / Letters





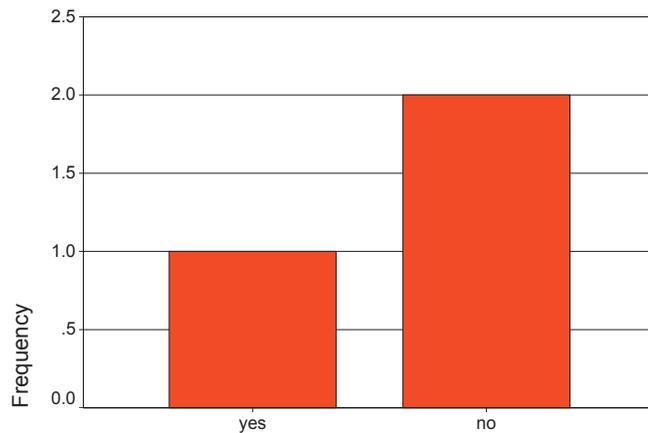




**Q10: Do you feel that you are part of the ODOT research program's strategic planning process?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

Do you feel that you are part of  
the research program's planning process?



**Q11: What types of research activities are you most interested in knowing about? (please check all that apply)**

**Q11A Requests for Proposals**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3 no	3	100.0	100.0	100.0

**Q11B Ohio's success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

**Q11C Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	100.0	100.0	100.0

**Q11D Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	3	100.0	100.0	100.0

**Q11E Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q11F Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q11G Strategic research plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

**Q11H Training opportunities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

**Q11I Implementation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 no	3	100.0	100.0	100.0

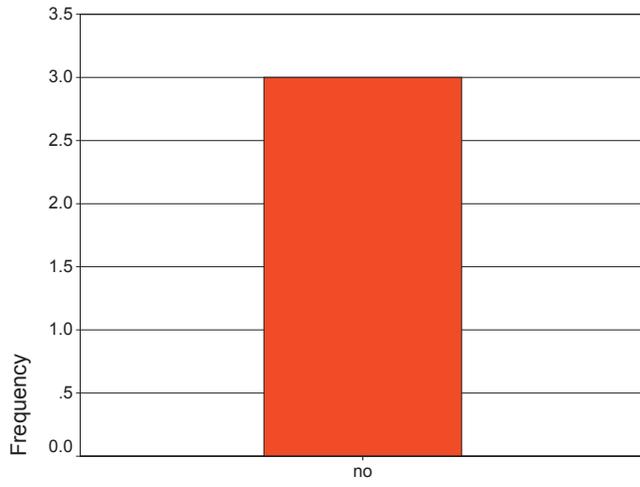
**Q11J Cost-saving measures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	2	66.7	66.7	66.7
2 no	1	33.3	33.3	100.0
Total	3	100.0	100.0	

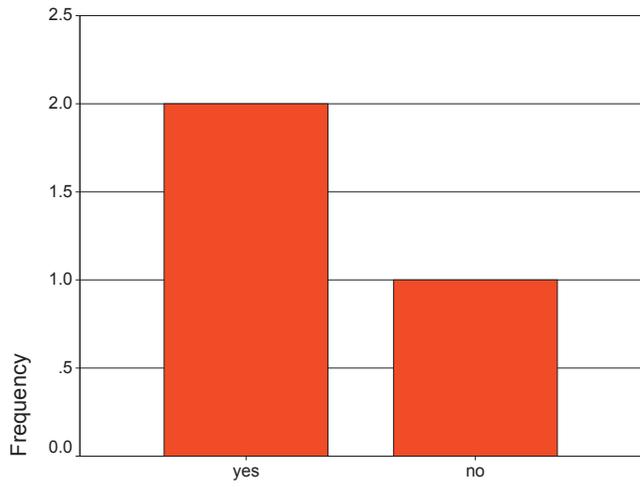
**Q11K Benchmarking with other states**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yes	1	33.3	33.3	33.3
2 no	2	66.7	66.7	100.0
Total	3	100.0	100.0	

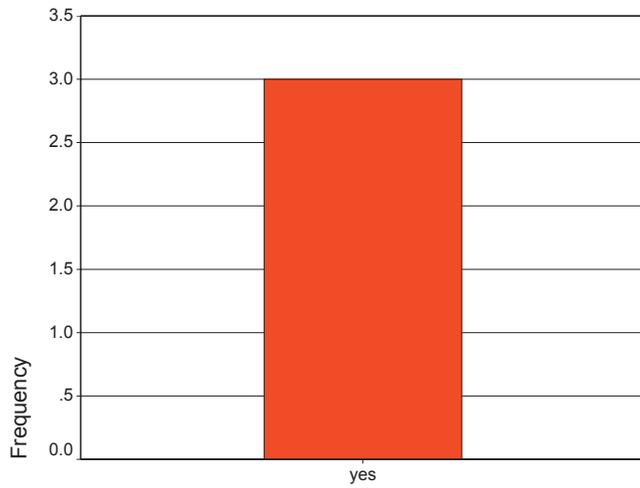
Requests for proposals

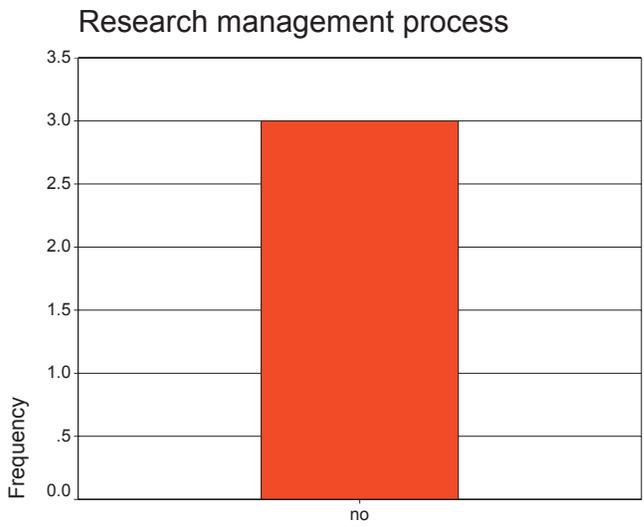
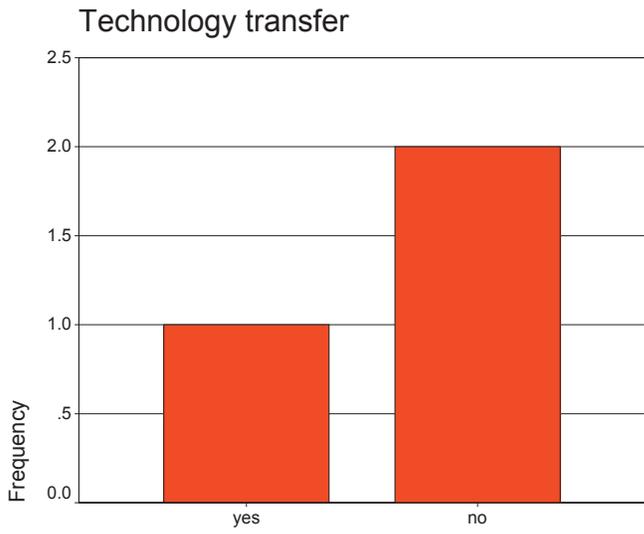
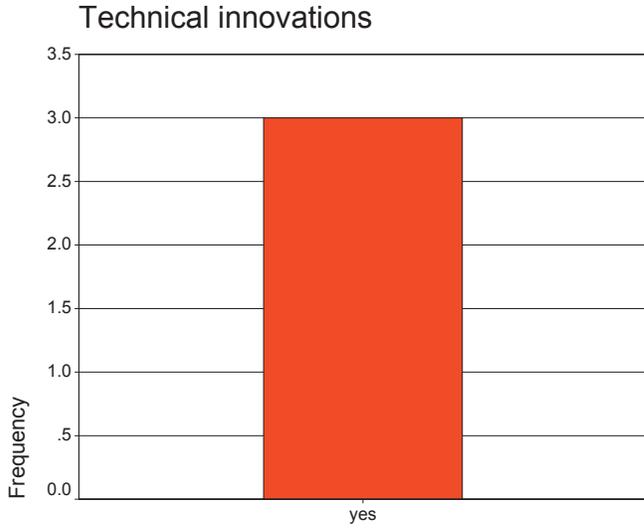


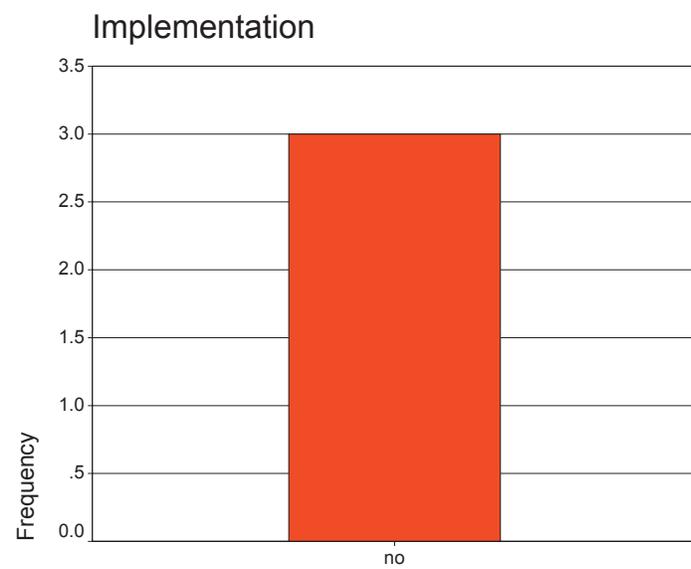
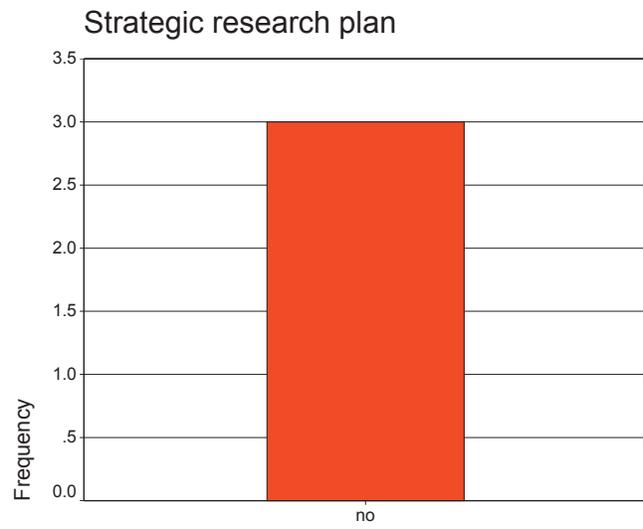
Ohio's success stories



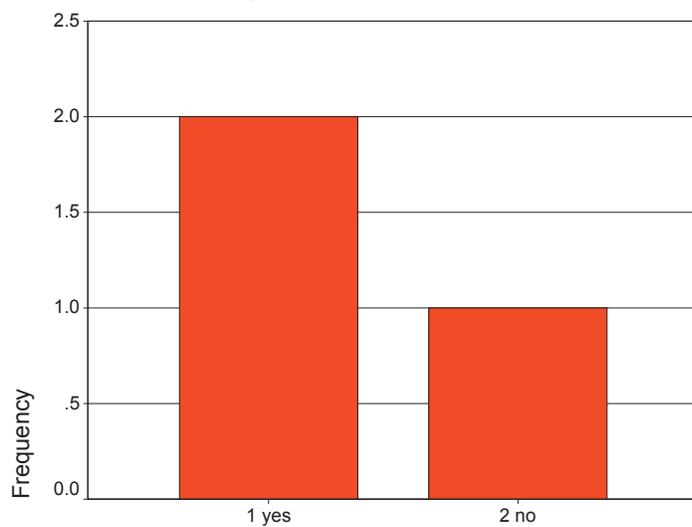
Best practices (local, national, etc.)



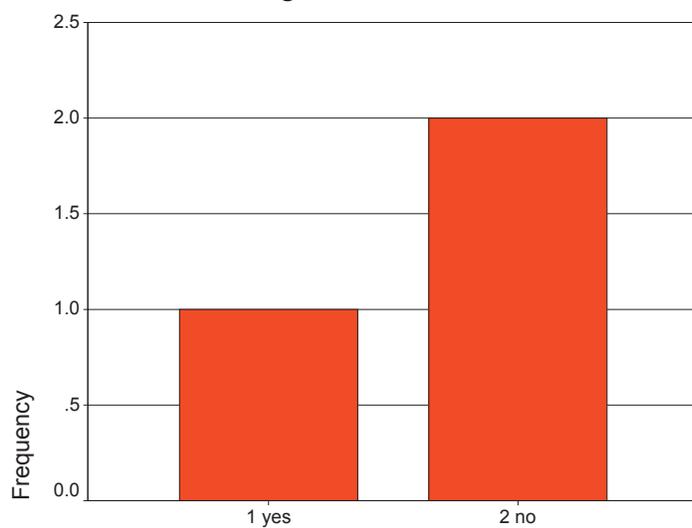




### Cost-saving measures



### Benchmarking with other states



**Q12: Finally, please take a moment to consider---and then list---any other of your associates or constituents who might take an interest in or value the products of the research program.**

**Appendix D  
OH Contractors Assn.  
Survey Results**

**Q1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, How interested are you in the activities of ODOT's research program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neutral	3	37.5	37.5	37.5
	somewhat interested	3	37.5	37.5	75.0
	very interested	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

**Q1A. What is the motivation for your interest in ODOT's research program?**

**To seek ways to reduce the costs of highway construction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	50.0	80.0	80.0
	no	1	12.5	20.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

**To seek ways to increase quality control of highway construction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	25.0	40.0	40.0
	no	3	37.5	60.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

**To seek ways to increase construction safety**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	5	62.5	100.0	100.0
Missing	System	3	37.5		
Total		8	100.0		

**To serve as a source of innovation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	12.5	20.0	20.0
	no	4	50.0	80.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

**It's part of my job description**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	62.5	100.0	100.0
Missing	System	3	37.5		
Total		8	100.0		

**To extend my knowledge in my field**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	37.5	60.0	60.0
	no	2	25.0	40.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

**To interact with researchers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	12.5	20.0	20.0
	no	4	50.0	80.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

**other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	12.5	20.0	20.0
	no	4	50.0	80.0	100.0
	Total	5	62.5	100.0	
Missing	System	3	37.5		
Total		8	100.0		

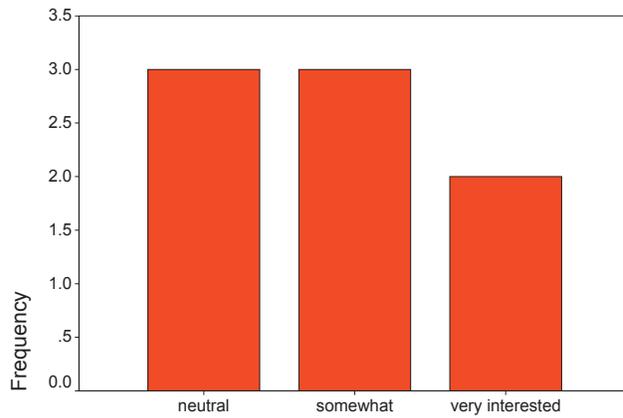
specify

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
univ.visiting committee	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Q1B. If you responded with a "4" or "5" to the question above, how has your interest in ODOT's research program improved the efficiency or effectiveness of your job or program?**

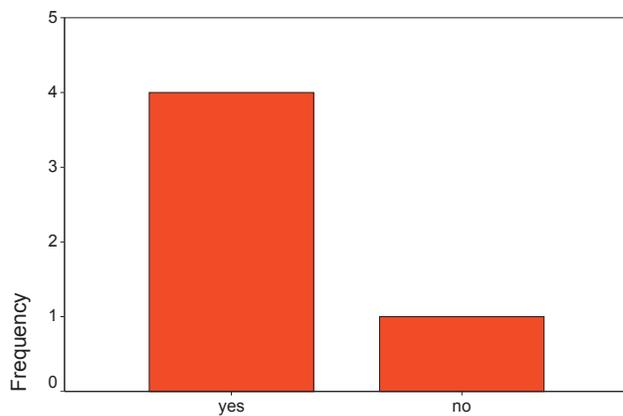
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
none	1	12.5	12.5	100.0
Total	8	100.0	100.0	

How interested are you in the activities of ODOT's research program?

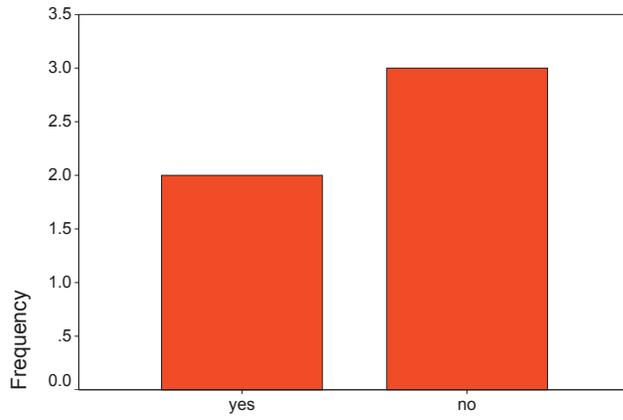


**What is the motivation for your interest?**

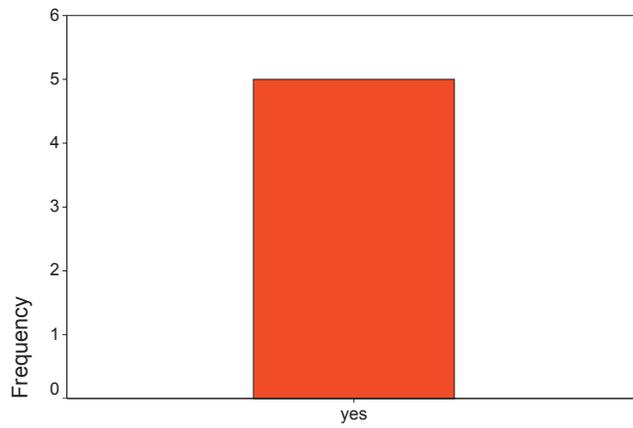
To seek ways to reduce the costs of highway construction



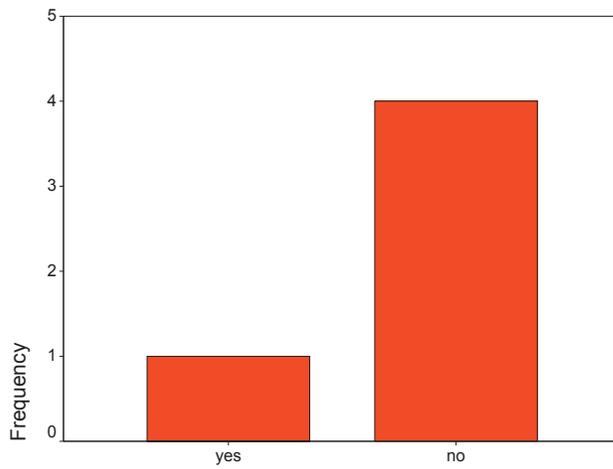
To seek ways to increase quality control of highway construction



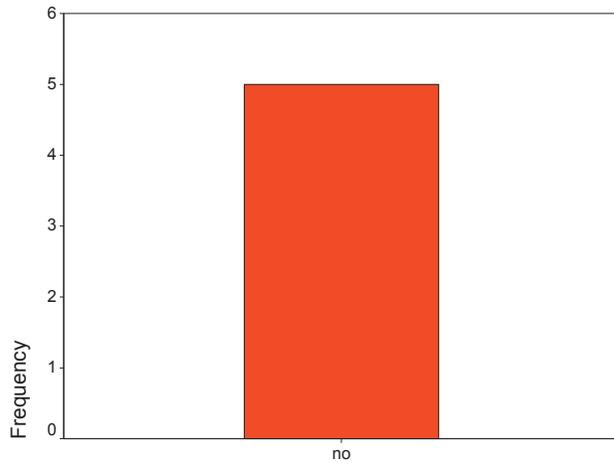
To seek ways to increase construction safety



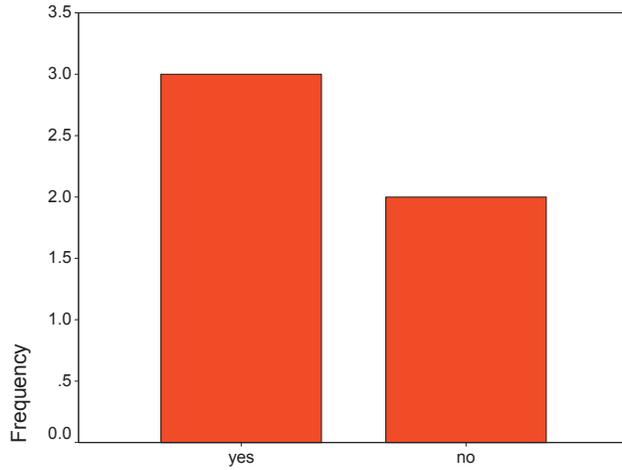
To serve as a source of innovation



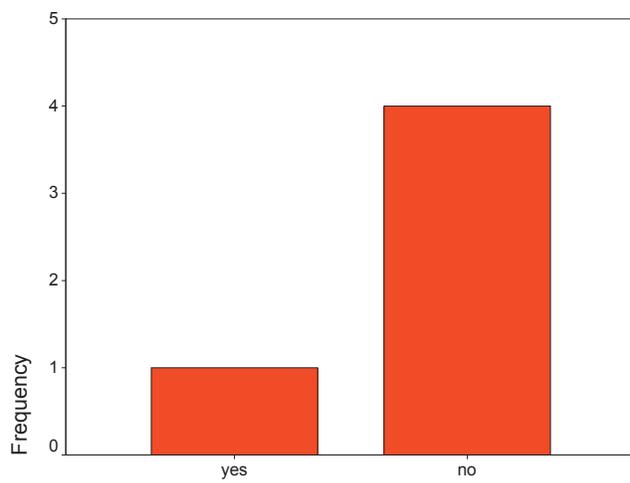
It's part of my job description

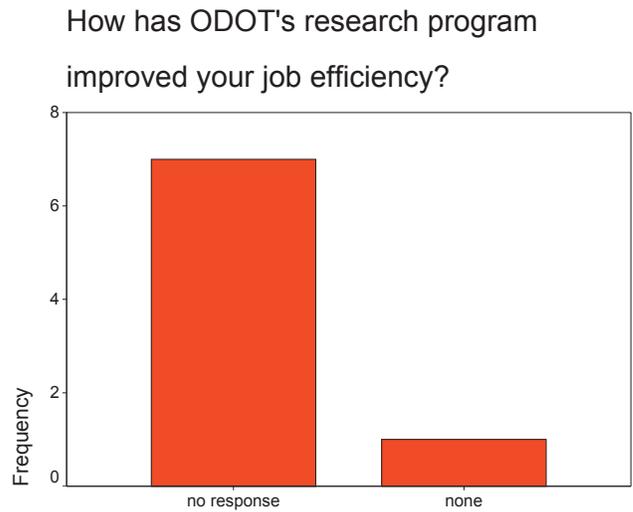
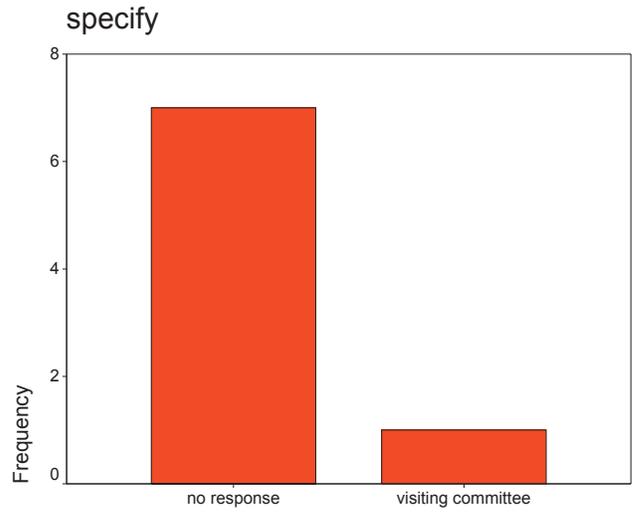
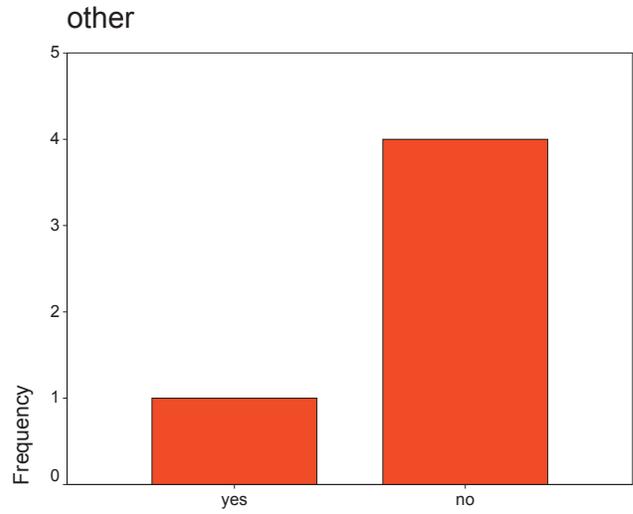


To extend my knowledge in my field



To interact with researchers





**Q2. Rate the following activities you expect from ODOT's research program according to priority.**

**To solve problems for constituents/trouble-shooting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	3	37.5	37.5	37.5
high priority	3	37.5	37.5	75.0
very high priority	2	25.0	25.0	100.0
Total	8	100.0	100.0	

**To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	4	50.0	57.1	57.1
somewhat a priority	2	25.0	28.6	85.7
high priority	1	12.5	14.3	100.0
Total	7	87.5	100.0	
Missing System	1	12.5		
Total	8	100.0		

**To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	6	75.0	85.7	85.7
very high priority	1	12.5	14.3	100.0
Total	7	87.5	100.0	
Missing System	1	12.5		
Total	8	100.0		

**To seek out or propose ways to improve ODOT activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	2	25.0	25.0	25.0
very high priority	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**To compile best practices from peers and other organizations and share**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid somewhat a priority	1	12.5	12.5	12.5
high priority	5	62.5	62.5	75.0
very high priority	2	25.0	25.0	100.0
Total	8	100.0	100.0	

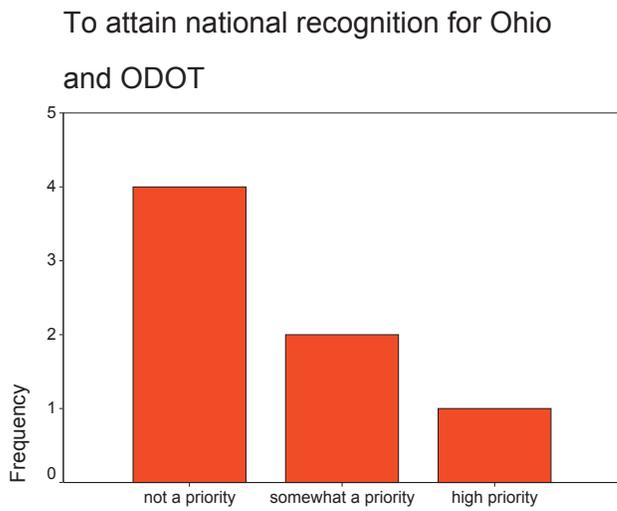
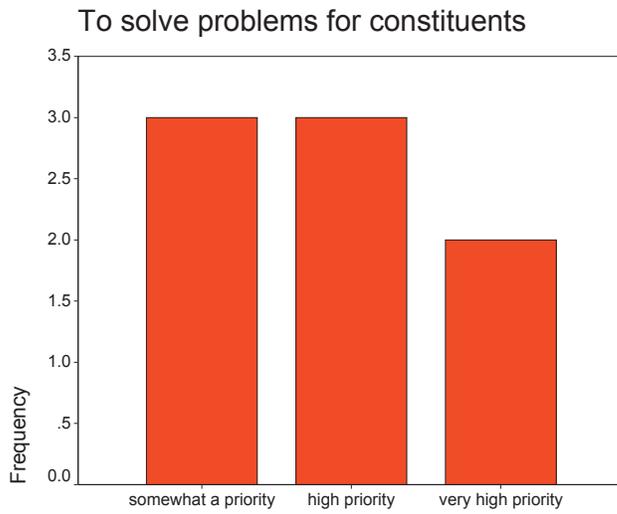
**other**

	Frequency	Percent
Missing System	8	100.0

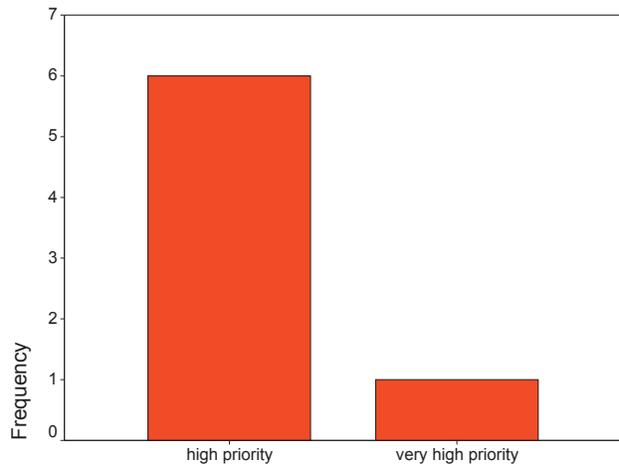
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	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	100.0	100.0	100.0

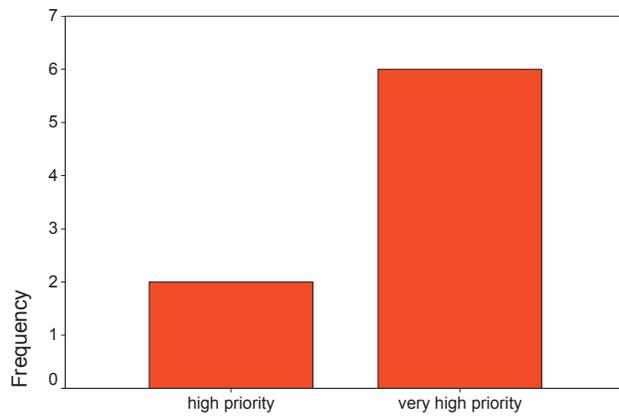
**Rate the following activities you expect from ODOT's research program according to priority.**



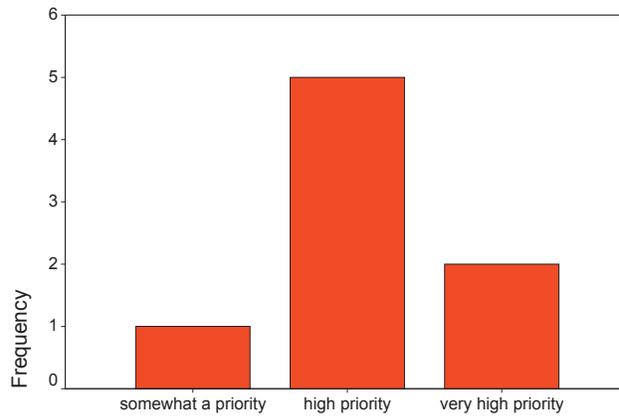
To serve as a technical resource



To seek out or propose ways to improve ODOT activities



To compile best practices from peers and other organizations and share



**Q3. What role do you believe the Contractors Association can best play in collaboration with ODOT's Research Office?**

**Generate project needs/ideas**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	6	75.0	85.7	85.7
	no	1	12.5	14.3	100.0
	Total	7	87.5	100.0	
Missing	System	1	12.5		
Total		8	100.0		

**Review proposals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	37.5	42.9	42.9
	no	4	50.0	57.1	100.0
	Total	7	87.5	100.0	
Missing	System	1	12.5		
Total		8	100.0		

**Monitor projects**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	25.0	33.3	33.3
	no	4	50.0	66.7	100.0
	Total	6	75.0	100.0	
Missing	System	2	25.0		
Total		8	100.0		

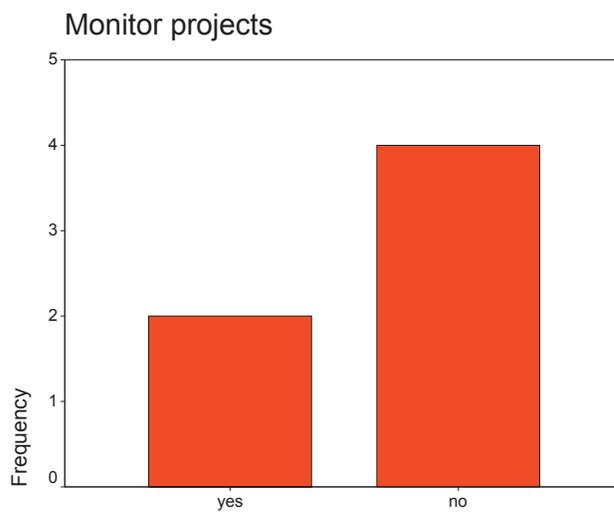
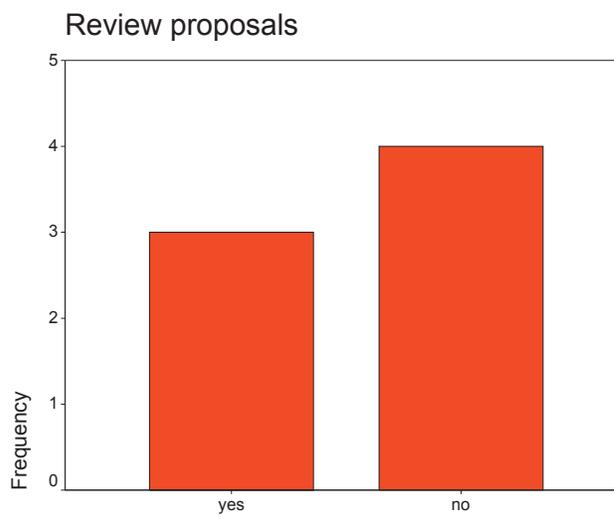
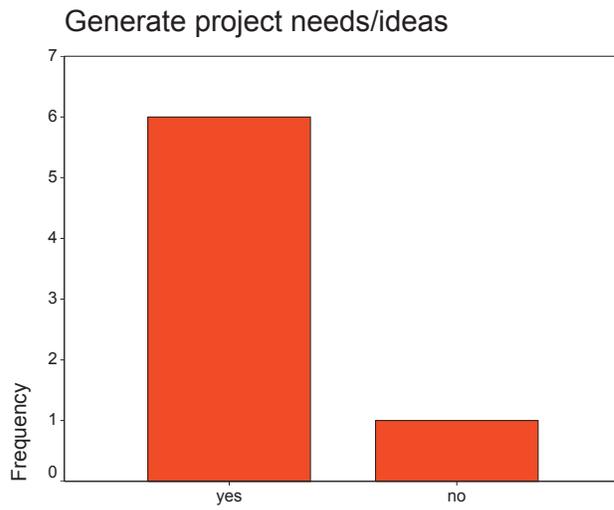
**Advisory board/strategic planning**

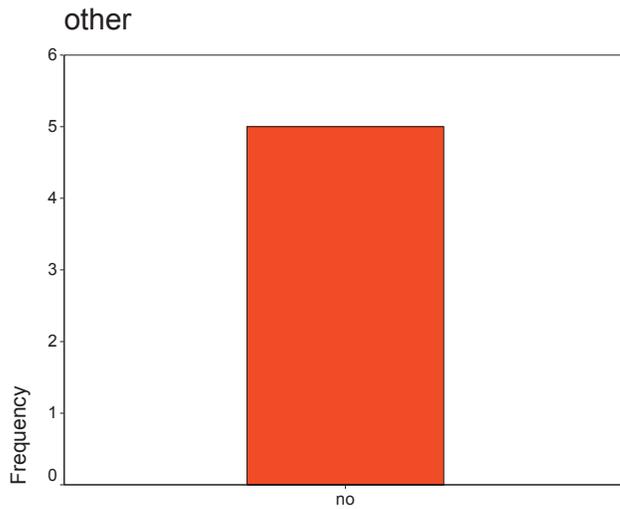
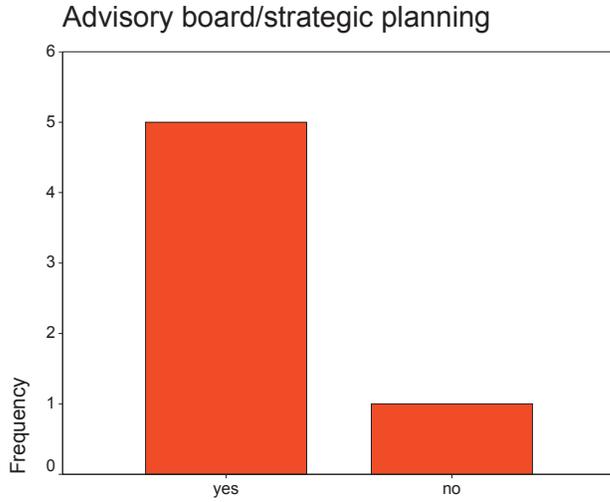
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	5	62.5	83.3	83.3
	no	1	12.5	16.7	100.0
	Total	6	75.0	100.0	
Missing	System	2	25.0		
Total		8	100.0		

**other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	62.5	100.0	100.0
Missing	System	3	37.5		
Total		8	100.0		

**What role do you believe the Contractors Association can best play in collaboration with ODOT's Research Office?**





**Q4. How do you learn of ODOT research program activities?**

**Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	50.0	50.0	50.0
no	4	50.0	50.0	100.0
Total	8	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Personal e-mails or listservs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	25.0	25.0
no	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**Conferences such as OTEC**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid OTEC	7	87.5	87.5	87.5
Total	8	100.0	100.0	100.0

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	28.6	28.6
no	5	62.5	71.4	100.0
Total	7	87.5	100.0	
Missing System	1	12.5		
Total	8	100.0		

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
newspaper	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
OCA	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	100.0	100.0	100.0

**other**

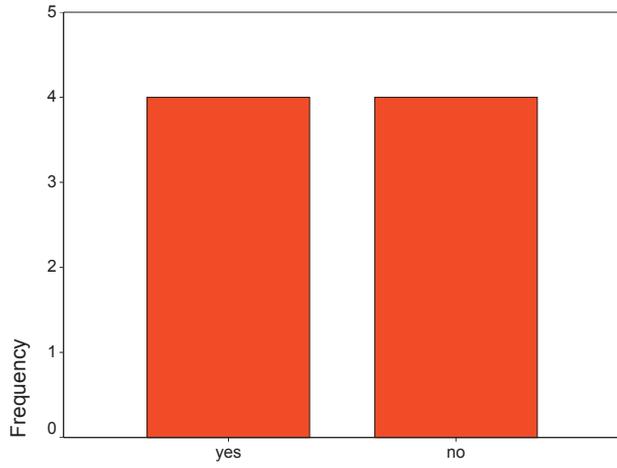
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**specify**

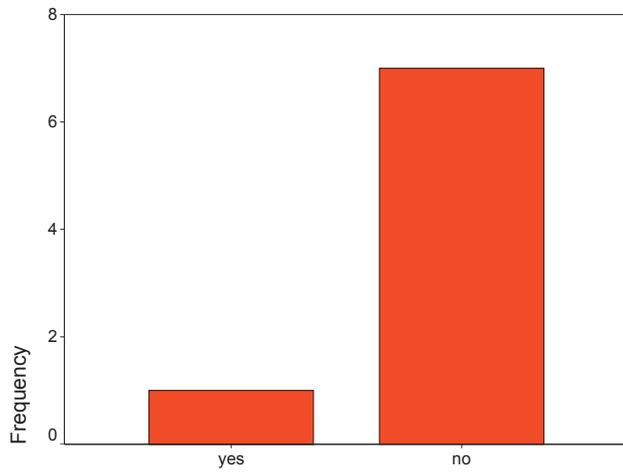
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	75.0	75.0	75.0
no info	1	12.5	12.5	87.5
OCA	1	12.5	12.5	100.0
Total	8	100.0	100.0	

### How do you learn of ODOT research program activities?

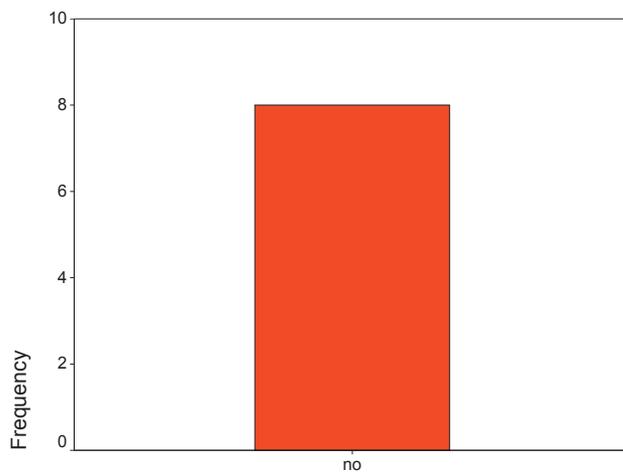
Transcript newsletter

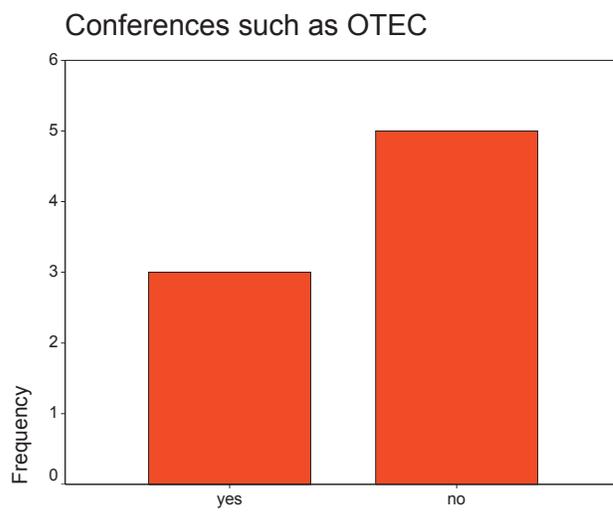
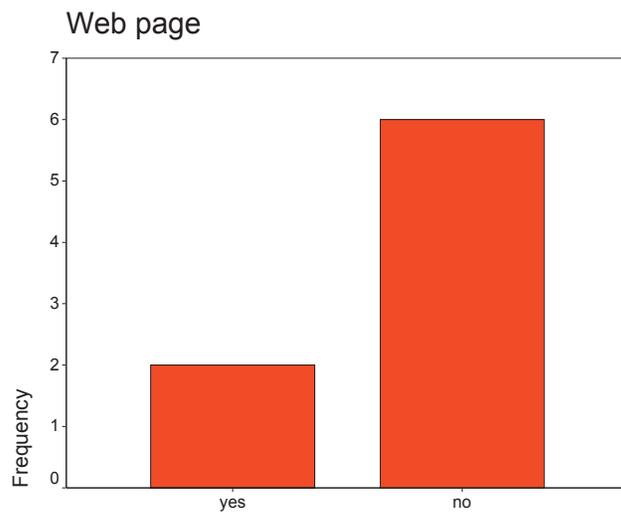
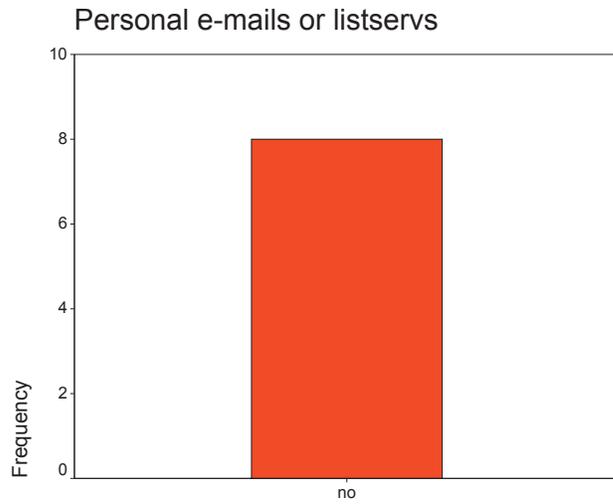


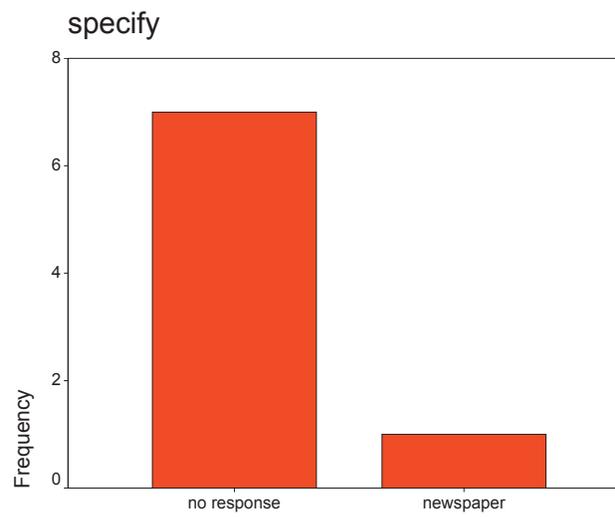
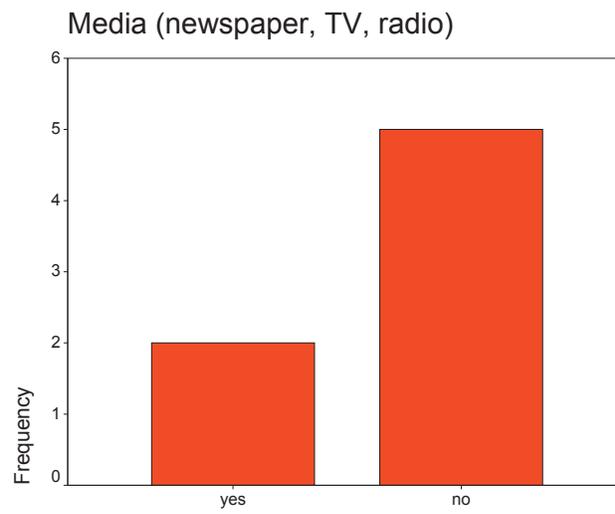
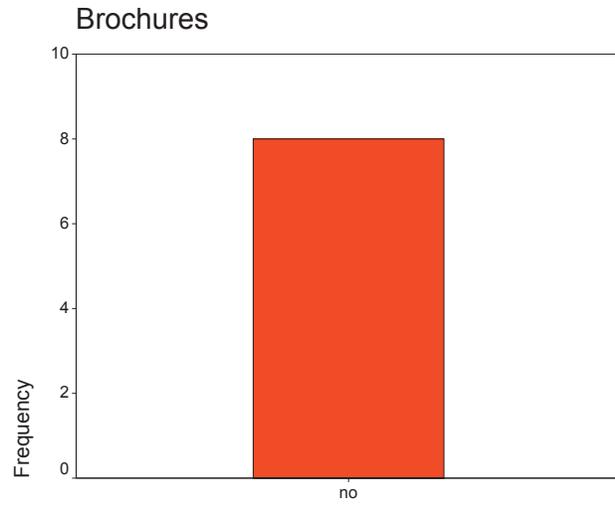
Moving Forward research newsletter

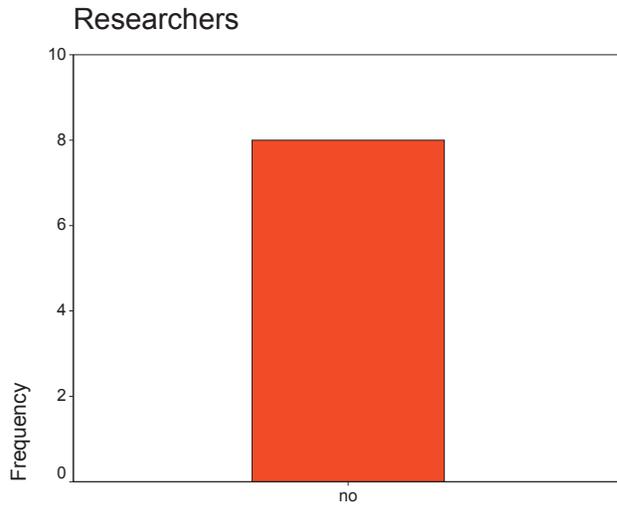
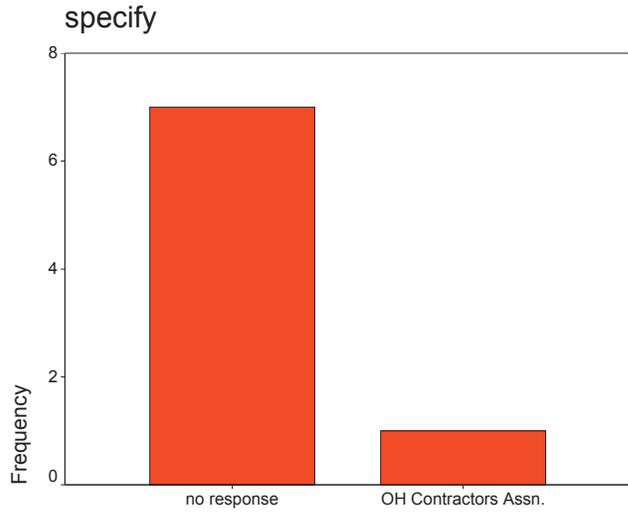
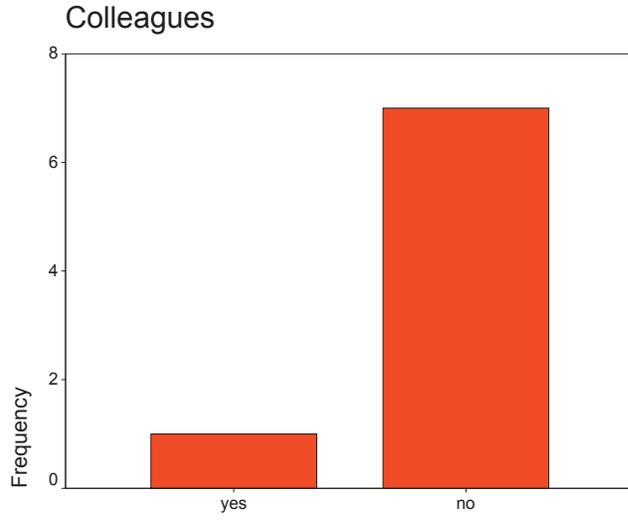


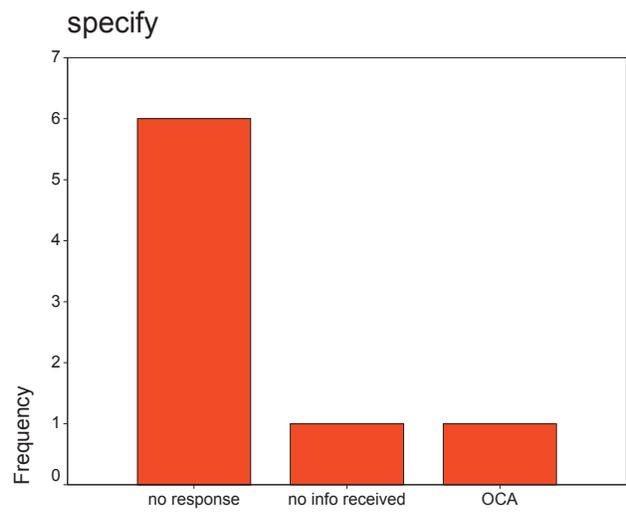
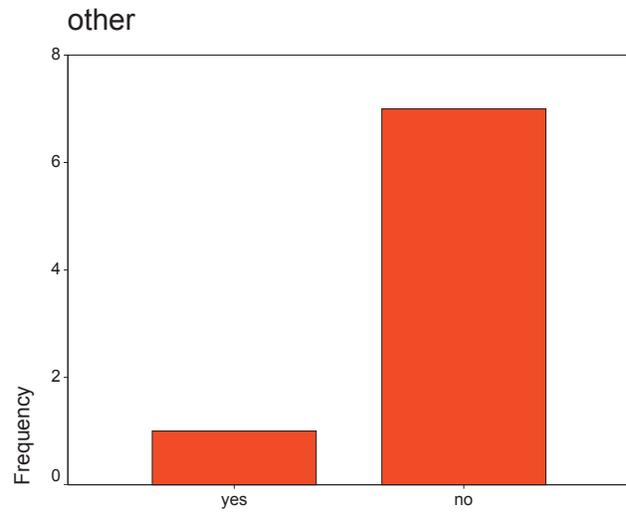
Letters





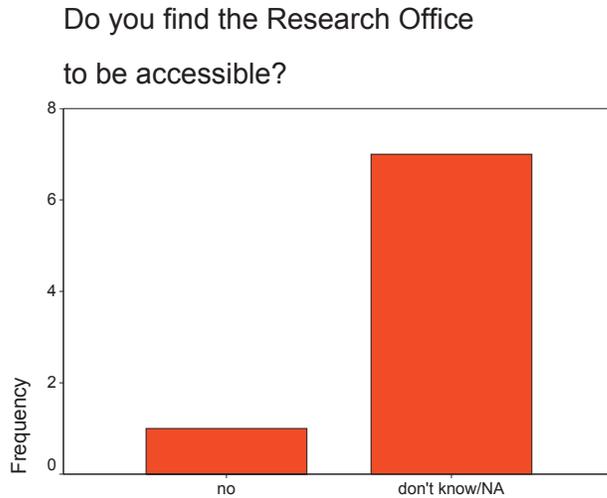






**Q5. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	1	12.5	12.5	12.5
don't know/not applicable	7	87.5	87.5	100.0
Total	8	100.0	100.0	



**Q6. Are you aware of any research program activities that resulted in the following?**

**Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid forms	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Safety improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Quality improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	25.0	25.0
no	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
OU pavement	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	87.5	87.5	87.5
forms	1	12.5	12.5	100.0
Total	8	100.0	100.0	

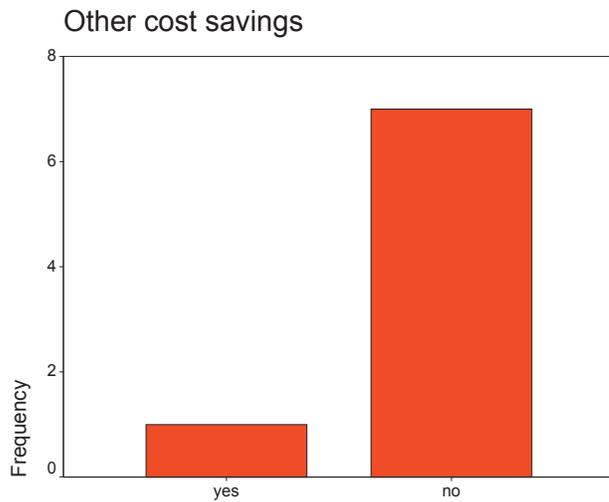
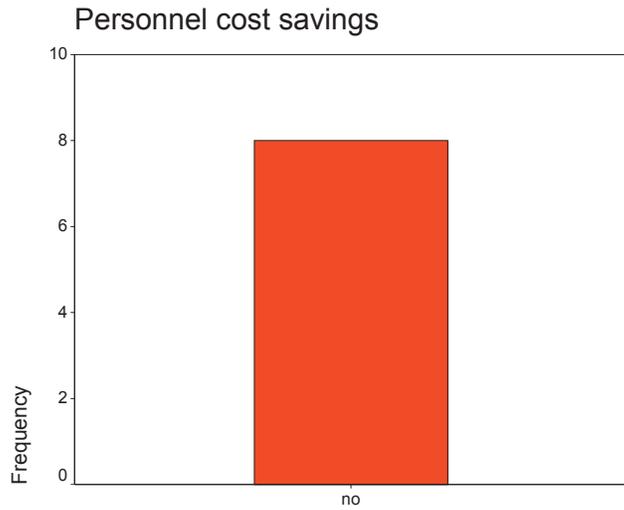
**other**

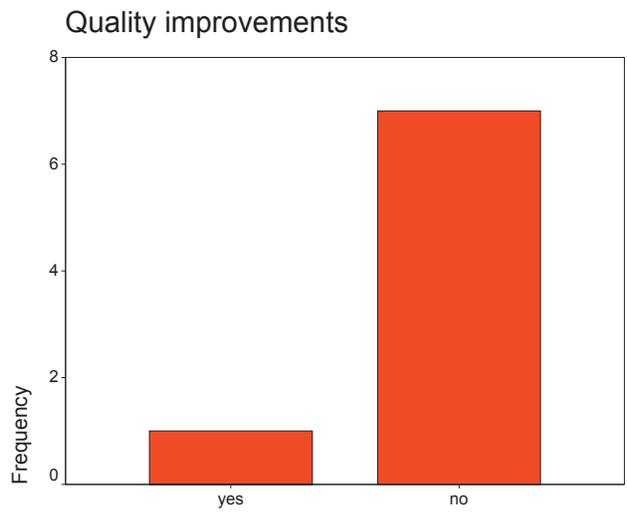
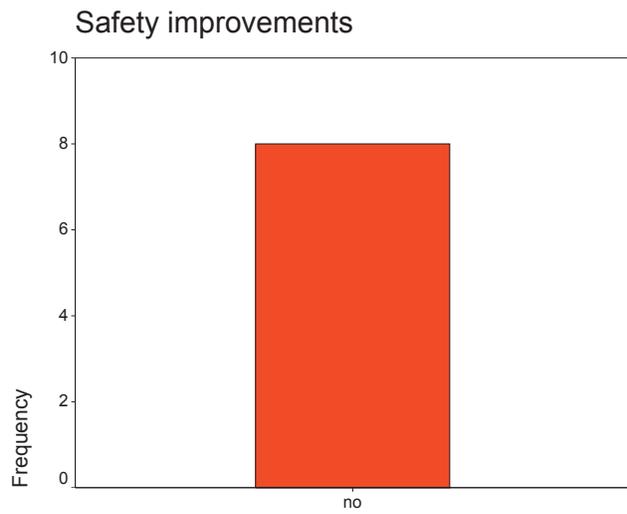
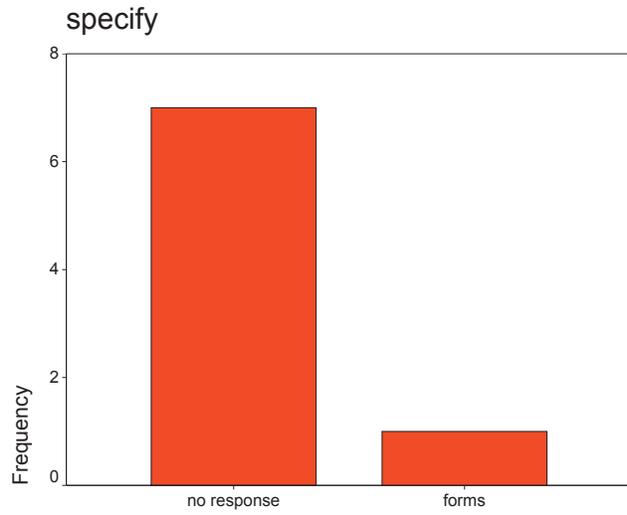
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	25.0	25.0
no	6	75.0	75.0	100.0
Total	8	100.0	100.0	

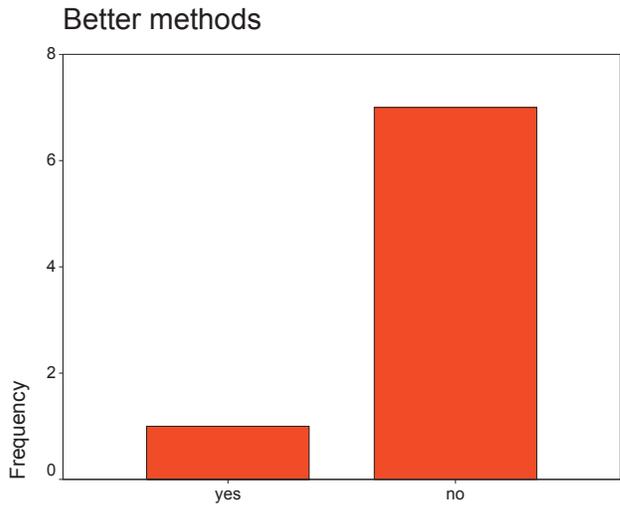
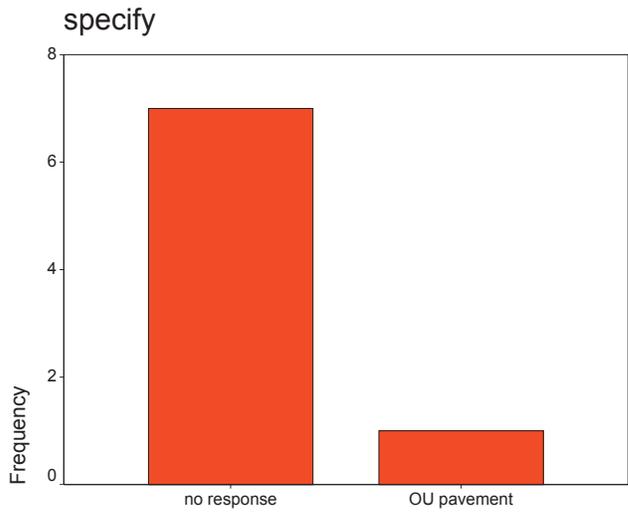
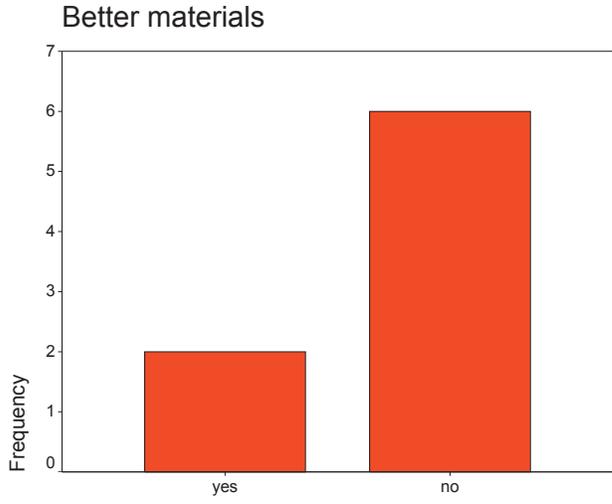
specify

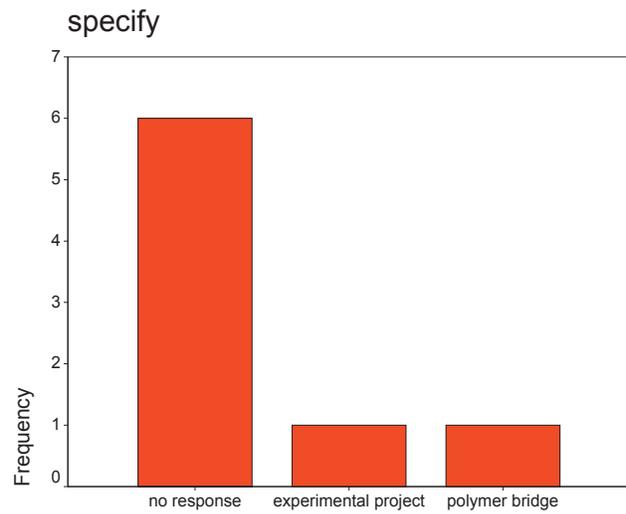
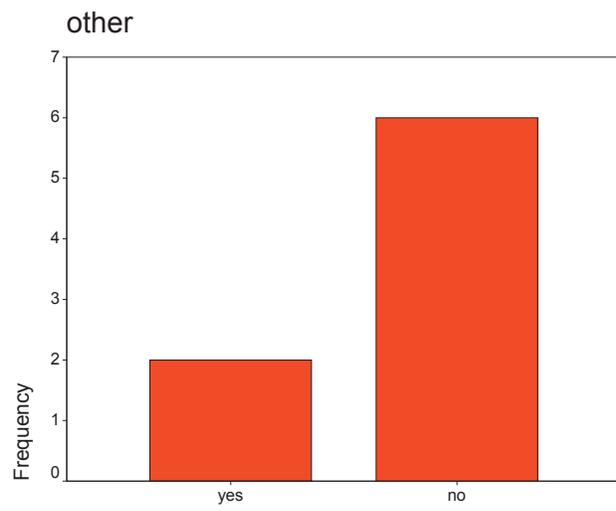
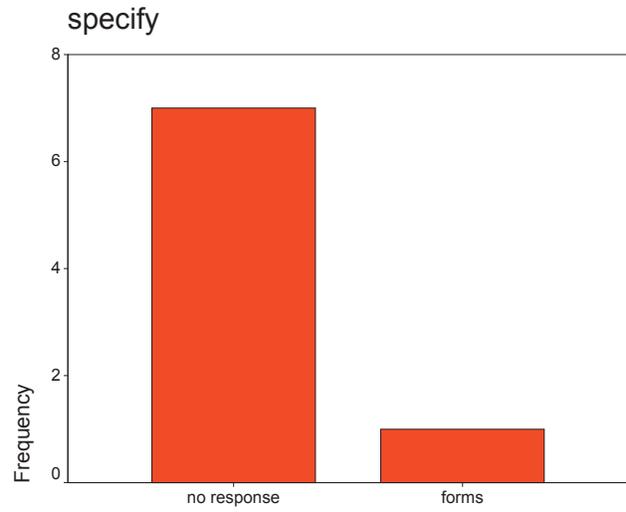
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	75.0	75.0	75.0
experimental project	1	12.5	12.5	87.5
polymer bridge	1	12.5	12.5	100.0
Total	8	100.0	100.0	

Are you aware of any research program activities that resulted in the following?









**Q7. Have you heard any of the following research projects?****SHRP Pavement Project on Delaware 23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	7	87.5	87.5	87.5
no	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Ohio Freight Study**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Evaluation of Warranty Provisions on ODOT Construction Projects**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	50.0	50.0	50.0
no	4	50.0	50.0	100.0
Total	8	100.0	100.0	

**Evaluation of Drainable Bases Under Asphalt Pavement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Development of Crash Reduction Techniques**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Innovative Bridge Design Construction Techniques to Expedite Construction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Comparison and Definition of State DOT's Practices in Selection of Pavements Materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	50.0	50.0	50.0
no	4	50.0	50.0	100.0
Total	8	100.0	100.0	

**Q7A. How did you hear of them?****Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	75.0	75.0	75.0
OCA, Flex Pavements	1	12.5	12.5	87.5
OTEC	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

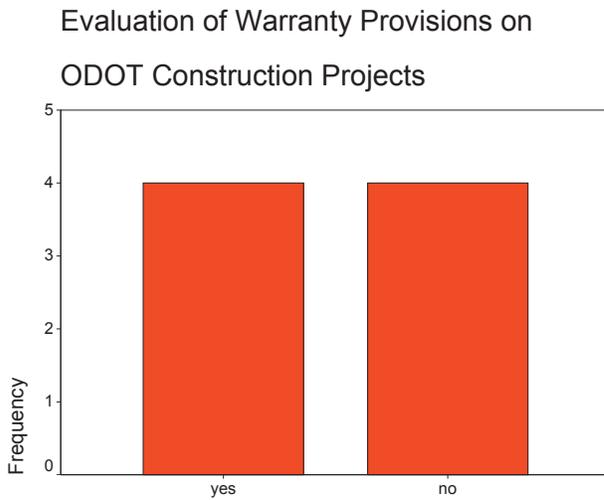
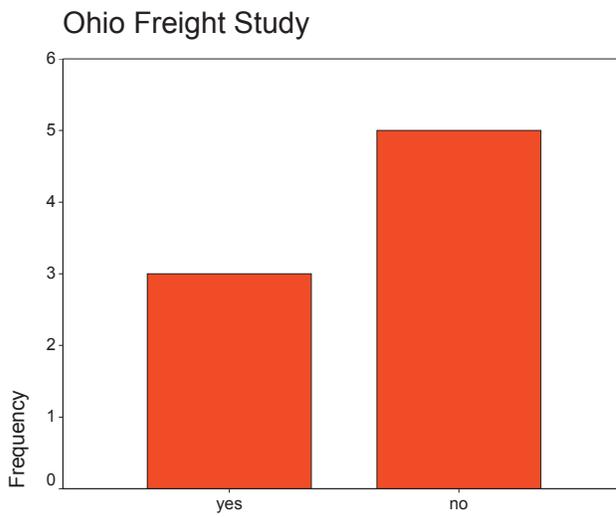
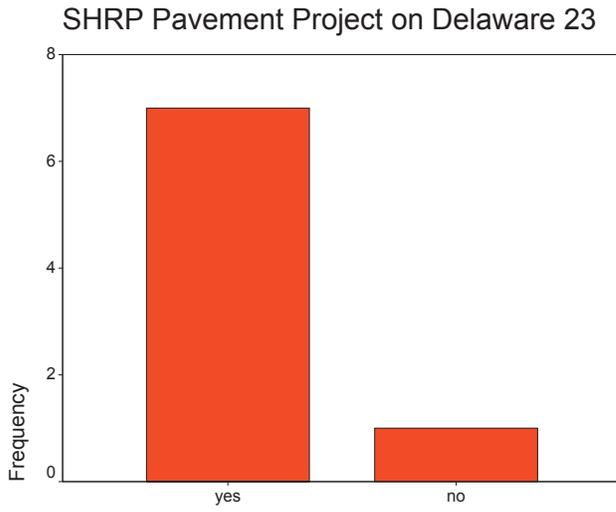
**other**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	42.9	42.9
no	4	50.0	57.1	100.0
Total	7	87.5	100.0	
Missing System	1	12.5		
Total	8	100.0		

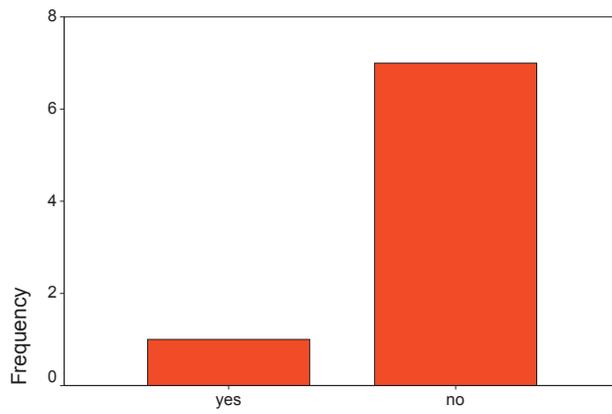
**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	62.5	62.5	62.5
contractor	1	12.5	12.5	75.0
OCA	1	12.5	12.5	87.5
ODOT work	1	12.5	12.5	100.0
Total	8	100.0	100.0	

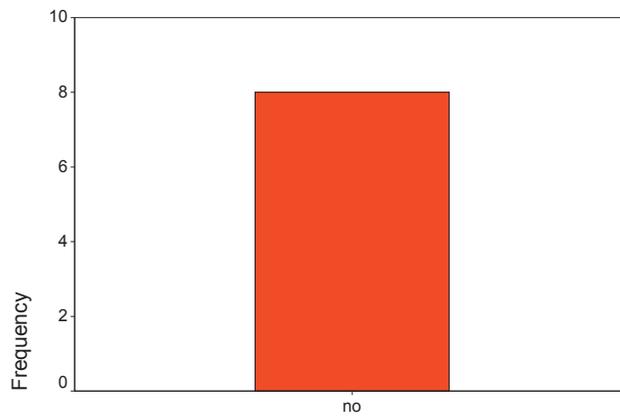
**Have you heard any of the following research projects?**



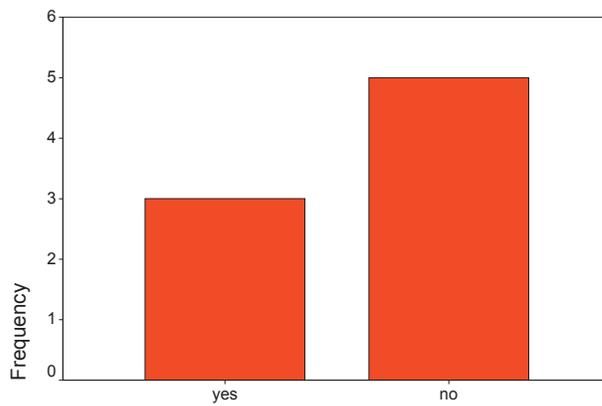
### Evaluation of Drainable Bases Under Asphalt Pavement



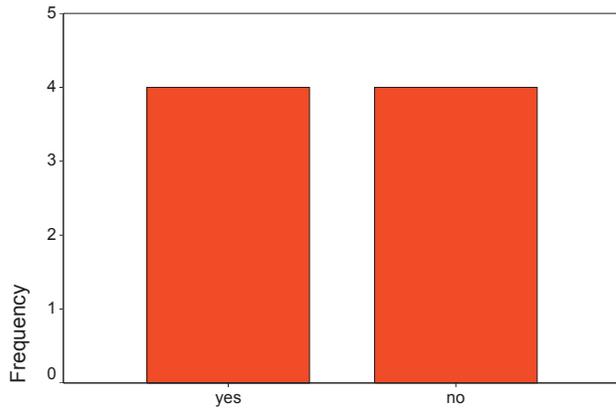
### Development of Crash Reduction Techniques



### Innovative Bridge Design Construction Techniques to Expedite Construction

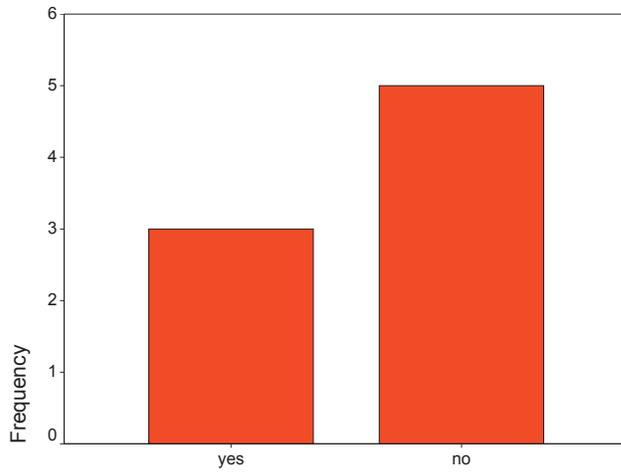


### Comparison and Definition of State DOT Practices in Pavements Materials Selection

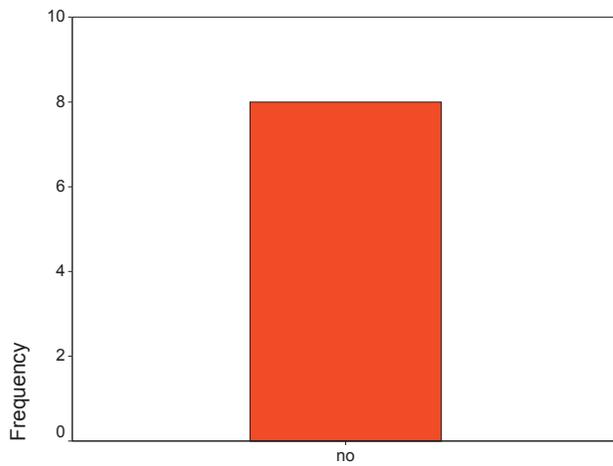


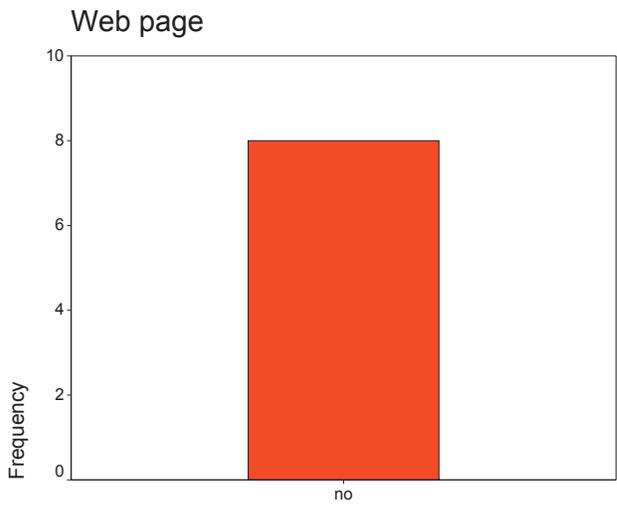
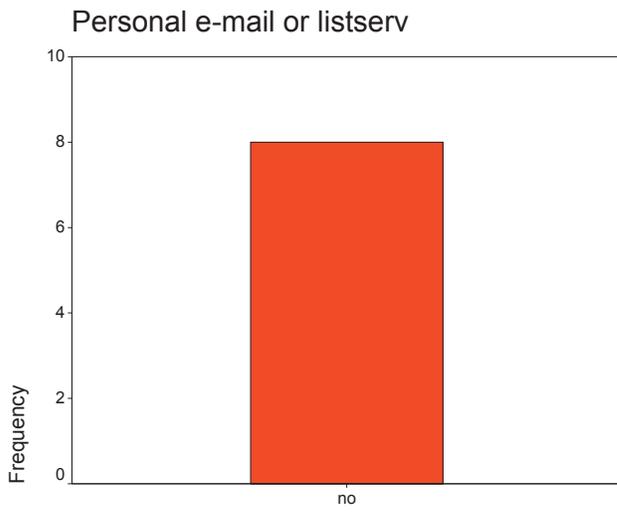
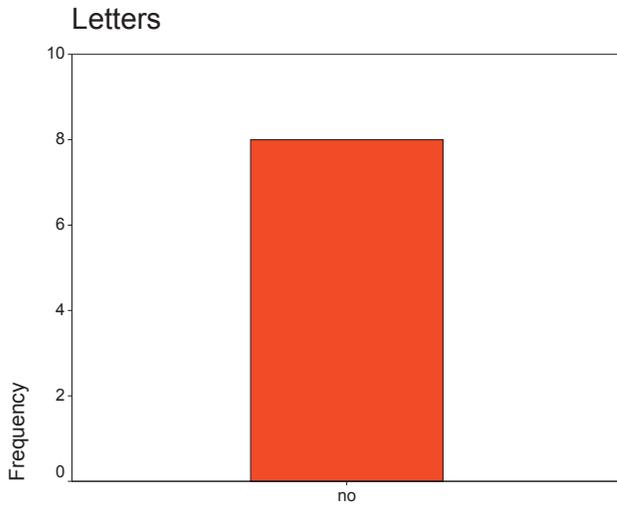
### How did you hear of them?

#### Transcript newsletter

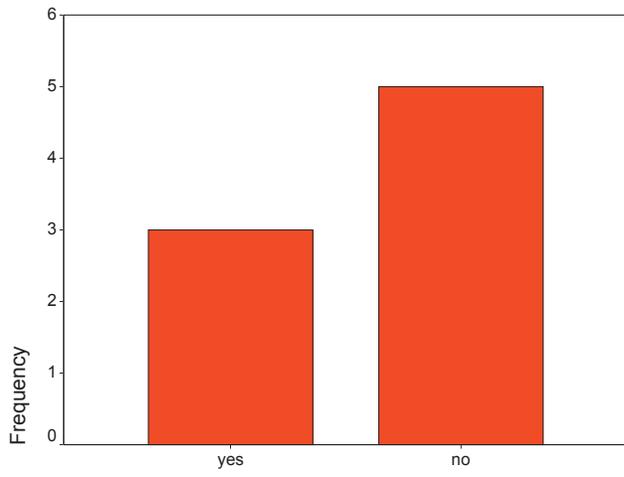


#### Moving Forward research newsletter

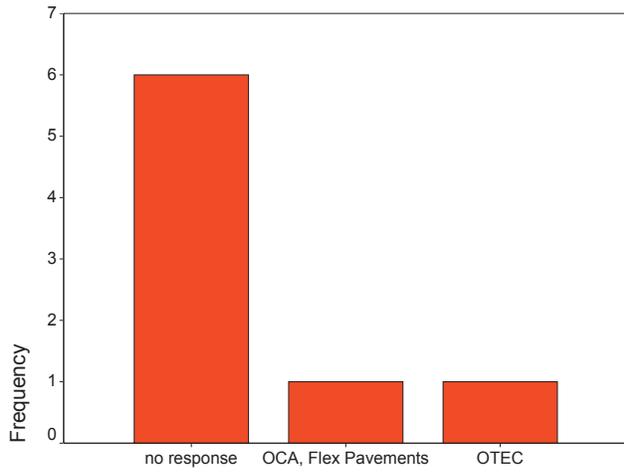




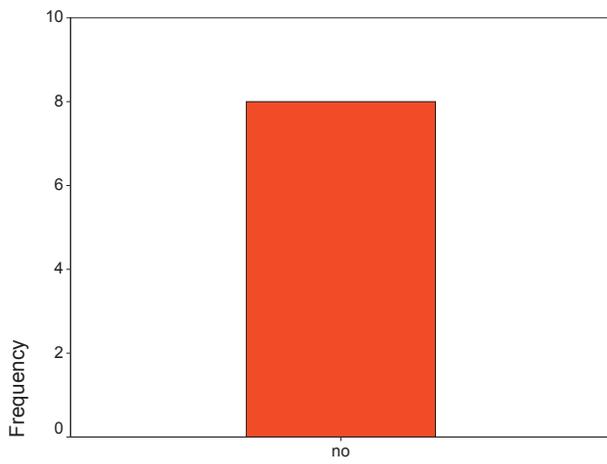
Conferences

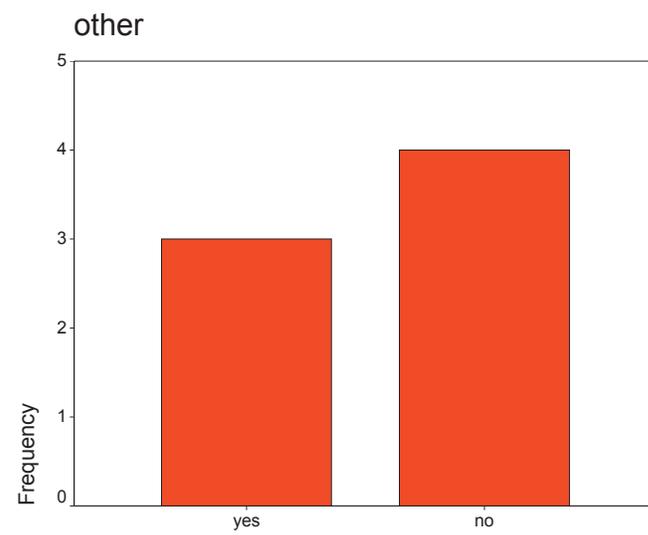
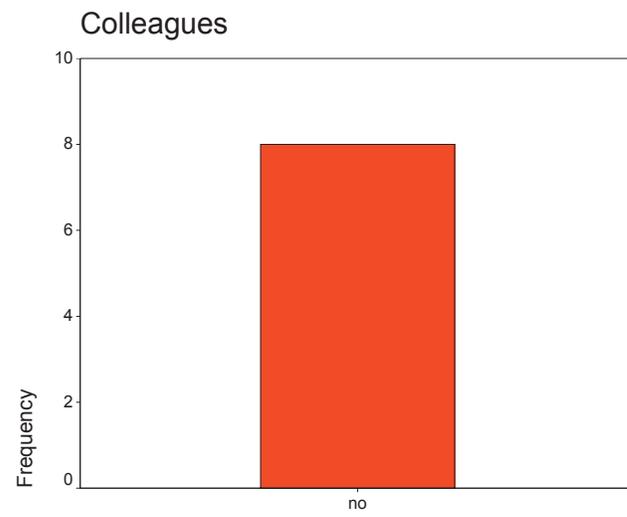
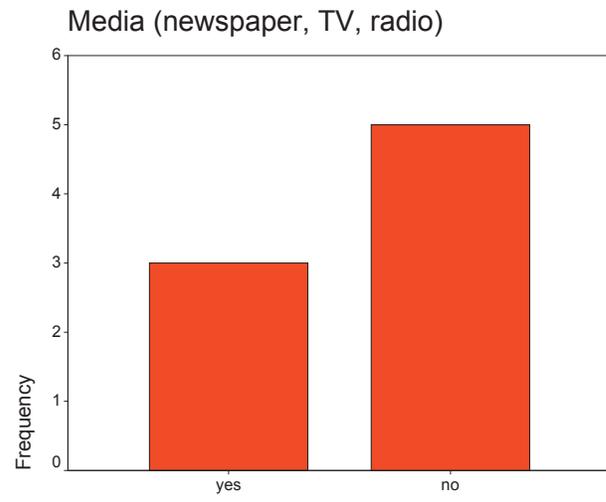


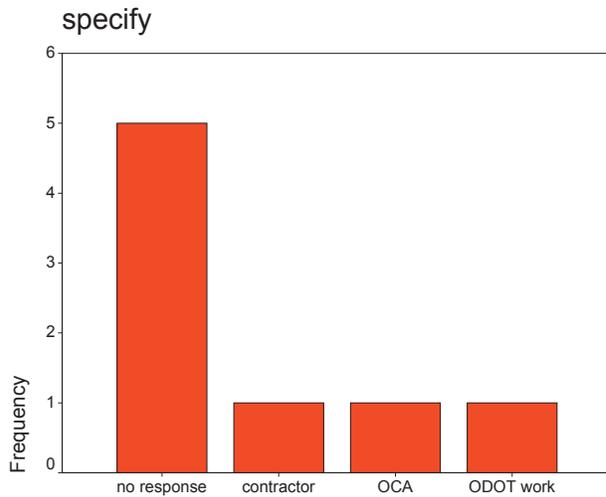
specify



Brochures







**Q8. What is your preferred source of info about the research program?  
How could ODOT's Research Office best keep in touch with you?**

**Transcript newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	62.5	62.5	62.5
no	3	37.5	37.5	100.0
Total	8	100.0	100.0	

**Moving Forward research newsletter**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	50.0	50.0	50.0
no	4	50.0	50.0	100.0
Total	8	100.0	100.0	

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	25.0	25.0
no	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	75.0	75.0	75.0
OCA winter conf.	1	12.5	12.5	87.5
OTEC	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Brochures**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Media (newspaper, TV, radio)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**other**

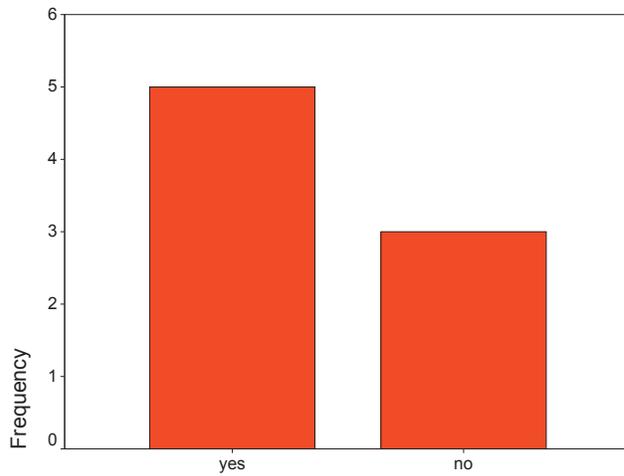
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**specify**

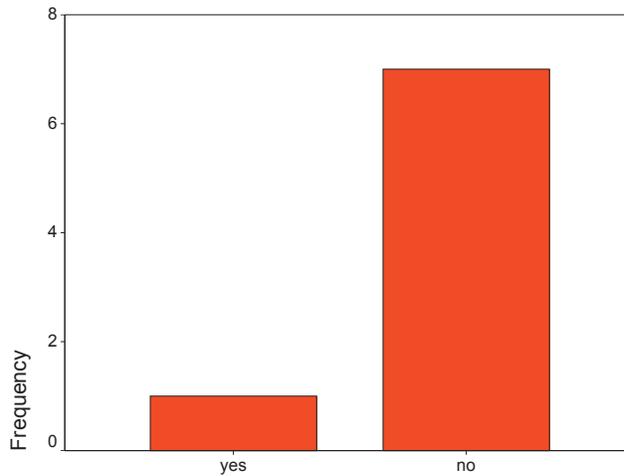
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid OCA	1	12.5	12.5	100.0
Total	8	100.0	100.0	

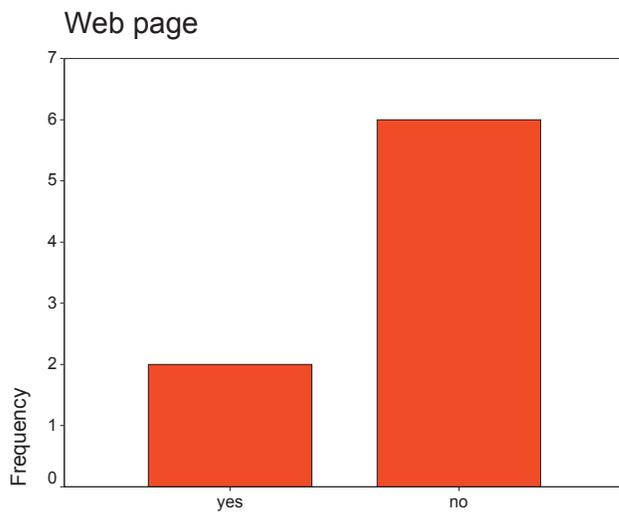
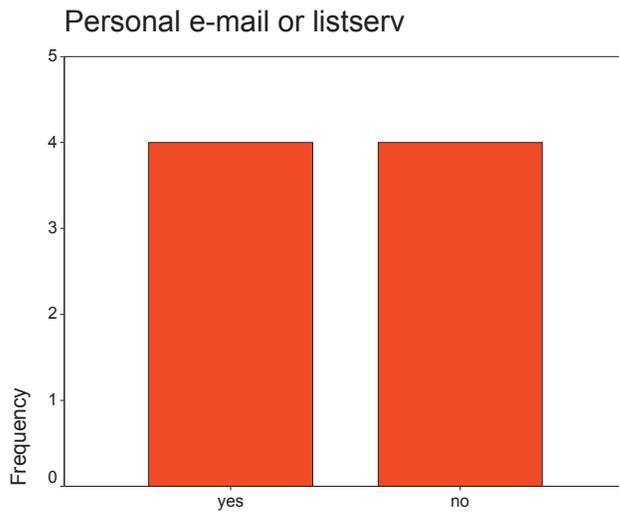
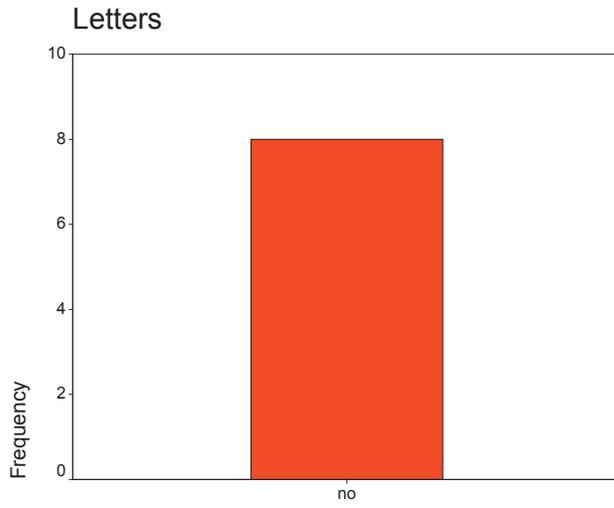
**What is your preferred source of info about the research program? How could ODOT's Research Office best keep in touch with you?**

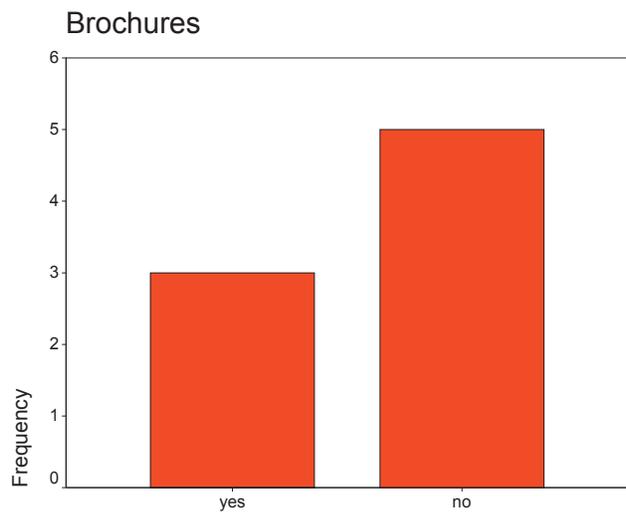
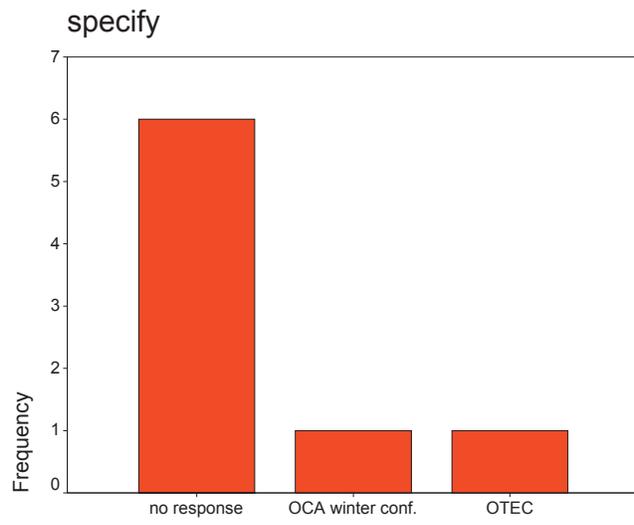
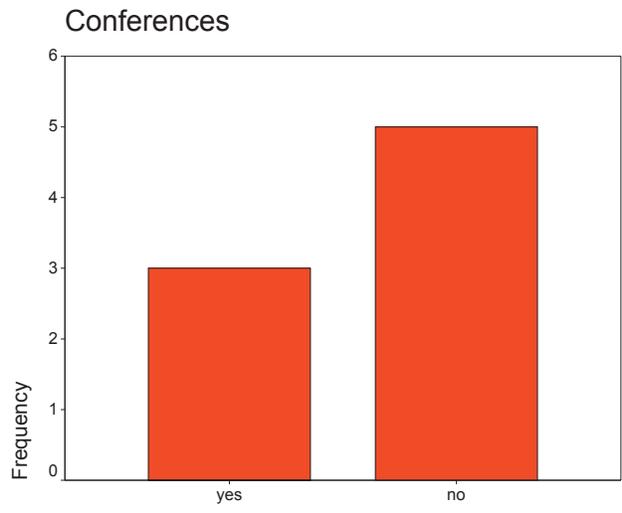
Transcript newsletter



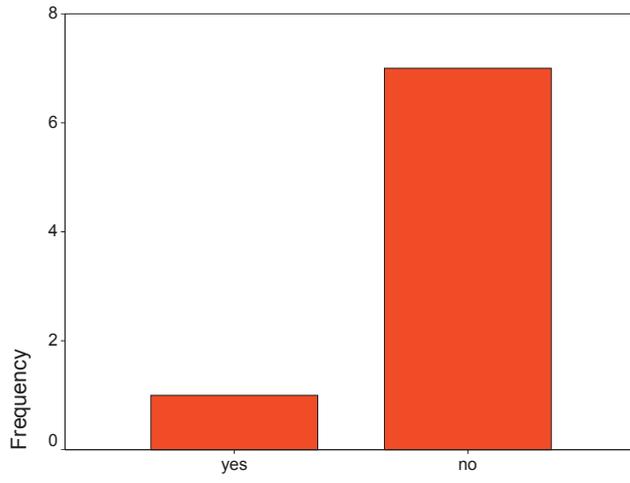
Moving Forward research newsletter



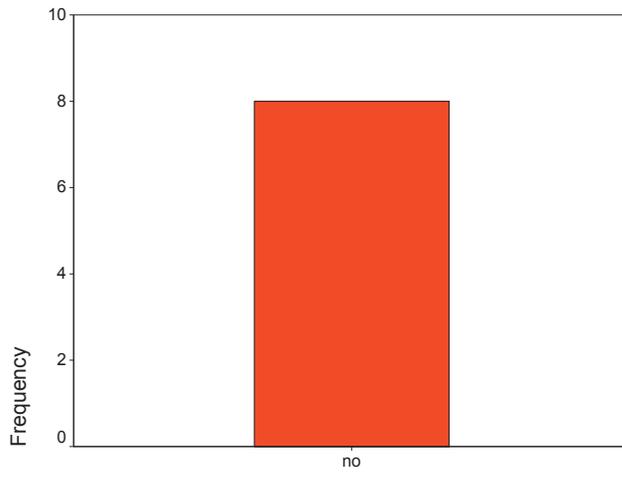




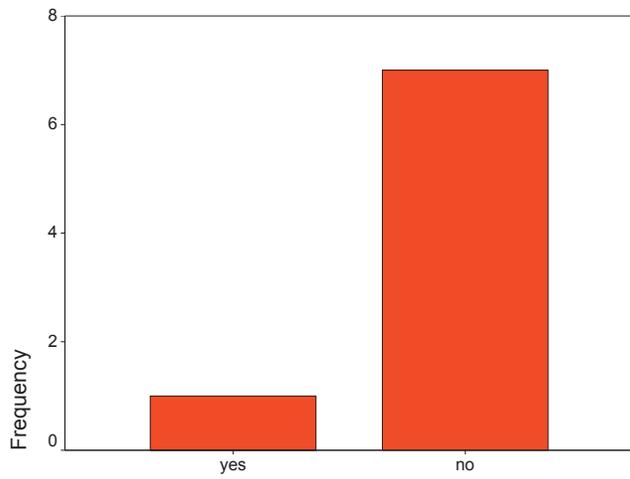
Media (newspaper, TV, radio)

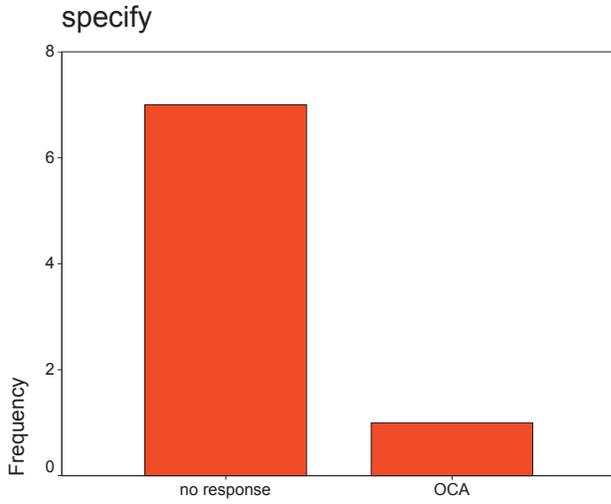


Colleagues



other

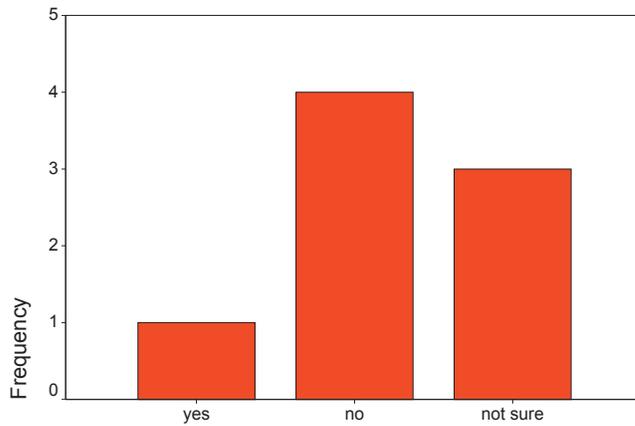




**Q9. Do you feel that you are part of the research program's strategic planning process?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	4	50.0	50.0	62.5
not sure	3	37.5	37.5	100.0
Total	8	100.0	100.0	

Do you feel that you are part of the research program's strategic planning process?



**Q10. What research activities are you most interested in knowing about?****Requests for Proposals**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Ohio's success stories**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	37.5	37.5	37.5
no	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Best practices (local, national, etc.)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	7	87.5	87.5	87.5
no	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Technical innovations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	6	75.0	75.0	75.0
no	2	25.0	25.0	100.0
Total	8	100.0	100.0	

**Technology transfer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	12.5	12.5	12.5
no	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Research management process**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	8	100.0	100.0	100.0

**Strategic research plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	25.0	25.0	25.0
no	6	75.0	75.0	100.0
Total	8	100.0	100.0	

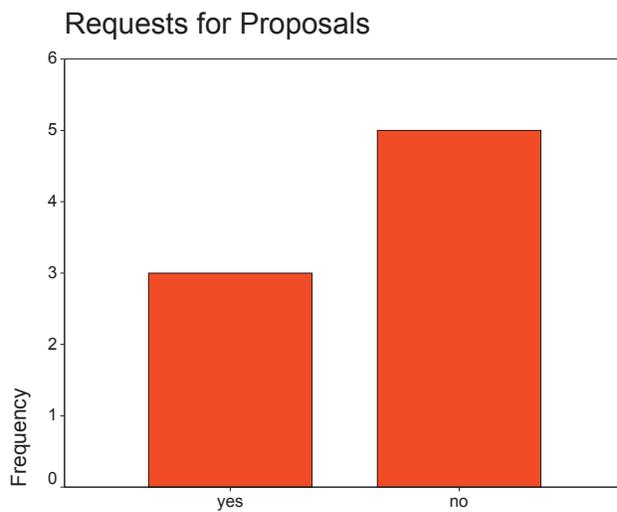
**Training opportunities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	62.5	62.5	62.5
no	3	37.5	37.5	100.0
Total	8	100.0	100.0	

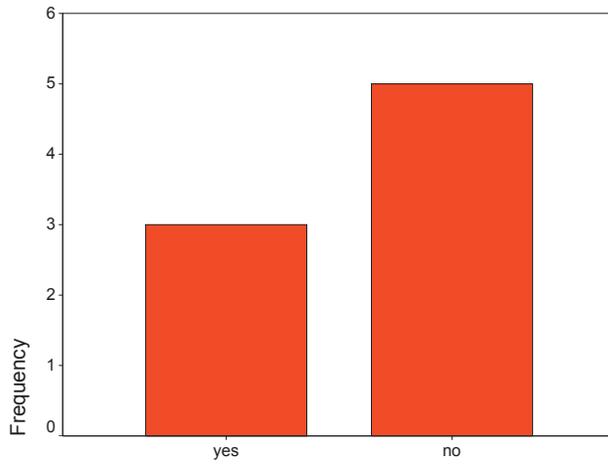
**Implementation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	5	62.5	62.5	62.5
no	3	37.5	37.5	100.0
Total	8	100.0	100.0	

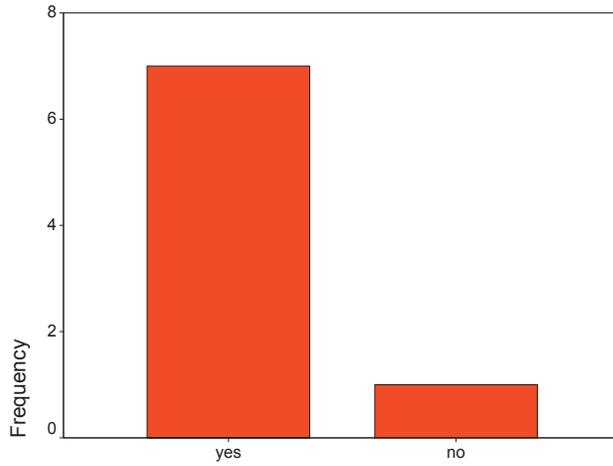
**What research activities are you most interested in knowing about?**



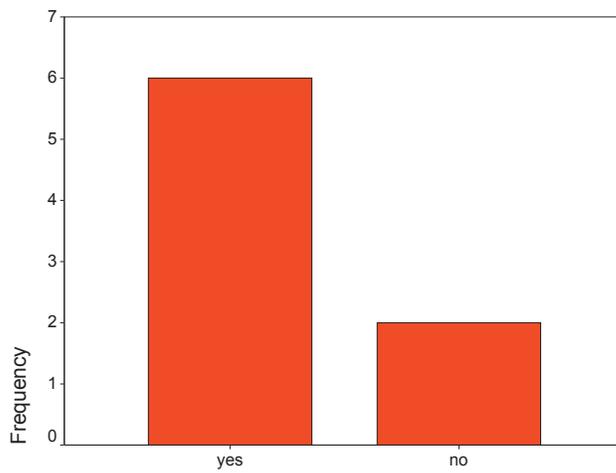
Ohio's success stories

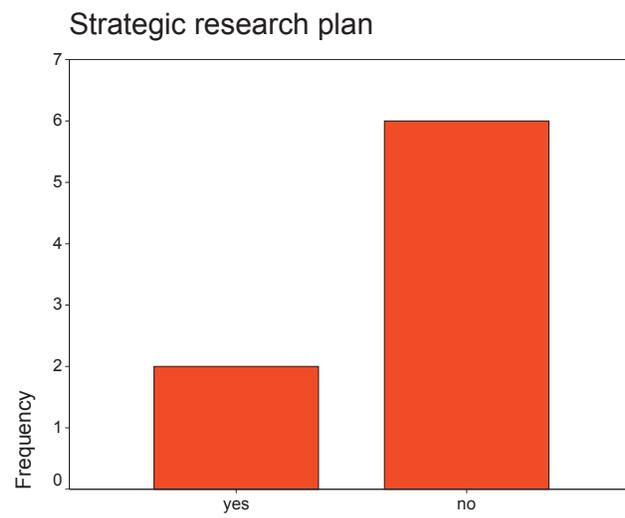
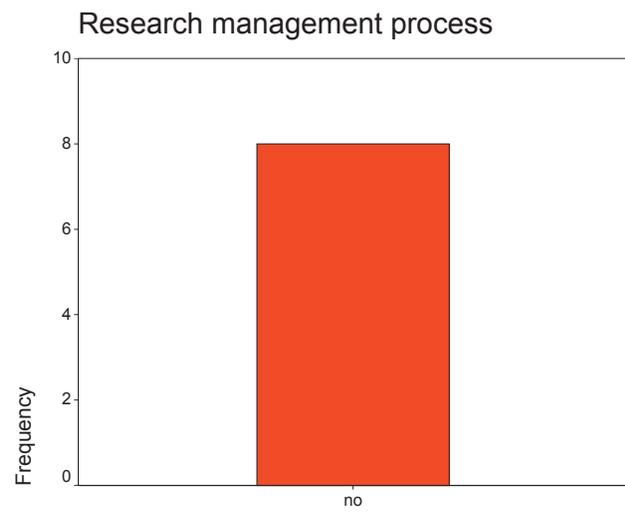
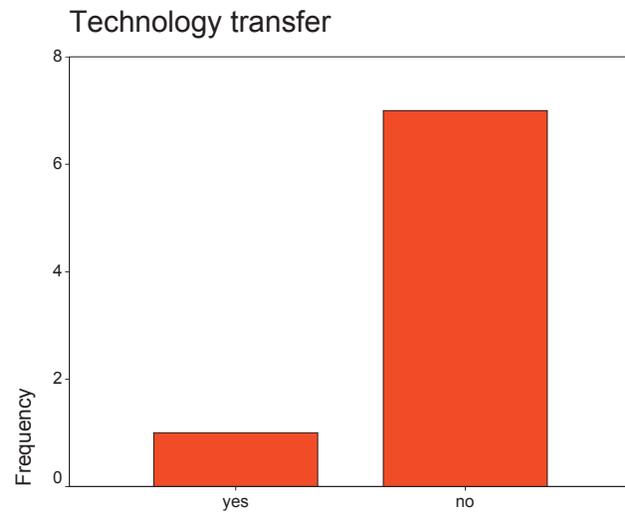


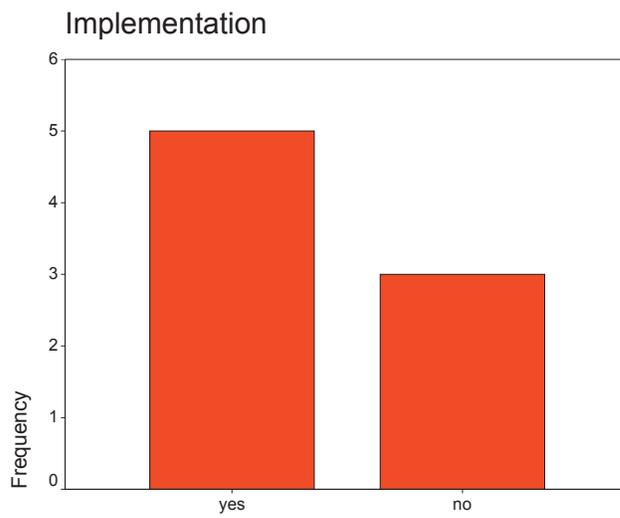
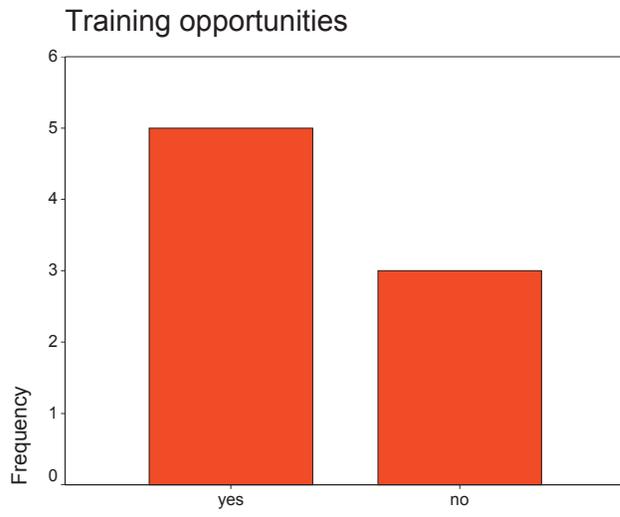
Best practices (local, national, etc.)



Technical innovations







**Appendix E**  
**OH Co. Engineers Assn.**  
**Survey Results**

**Q1. On a scale of 1 to 5, with 1 being not at all interested and 5 being very interested, how interested are you in the activities of ODOT's research program?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not at all interested	1	14.3	14.3	14.3
not very interested	1	14.3	14.3	28.6
neutral	1	14.3	14.3	42.9
somewhat interested	4	57.1	57.1	100.0
Total	7	100.0	100.0	

**Q1A. What is the motivation for your interest?**

**To provide solutions to technical problems relating to my work**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	4	57.1	100.0	100.0
Missing System	3	42.9		
Total	7	100.0		

**It's part of my job description**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	4	57.1	100.0	100.0
Missing System	3	42.9		
Total	7	100.0		

**To extend my knowledge in my field**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	42.9	75.0	75.0
no	1	14.3	25.0	100.0
Total	4	57.1	100.0	
Missing System	3	42.9		
Total	7	100.0		

**To interact with researchers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	4	57.1	100.0	100.0
Missing System	3	42.9		
Total	7	100.0		

**Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	25.0	25.0
	no	3	42.9	75.0	100.0
	Total	4	57.1	100.0	
Missing	System	3	42.9		
Total		7	100.0		

**Specify**

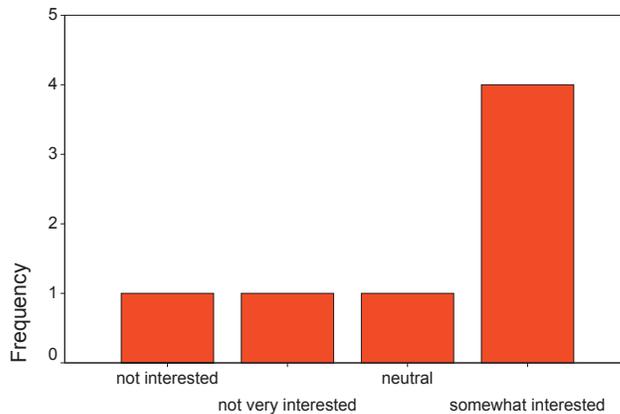
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	85.7	85.7	85.7
	alternative design issues & training	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**Q1B. How has your interest in ODOT's research program improved the efficiency or effectiveness of your job or program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	57.1	57.1	57.1
	no improvement	1	14.3	14.3	71.4
	none.LTAP being explored	1	14.3	14.3	85.7
	revised spec to simplify development time and cost	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

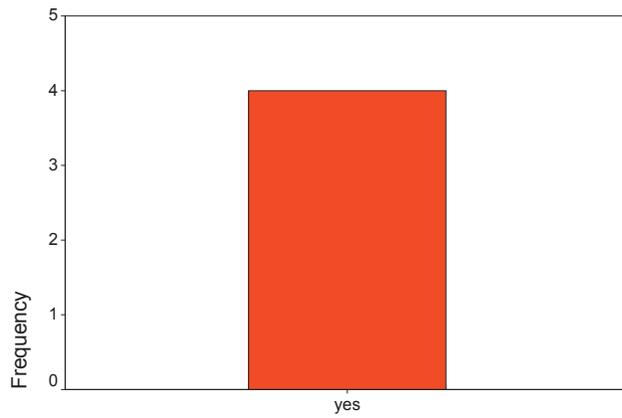
How interested are you in ODOT

Research Program activities?

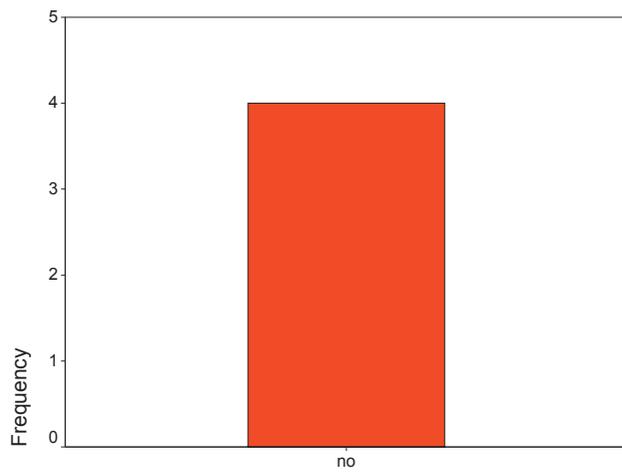


What is the motivation for your interest?

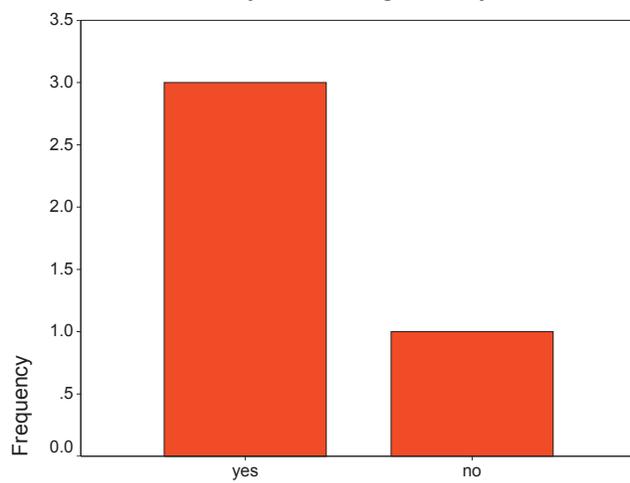
To provide solutions to technical problems

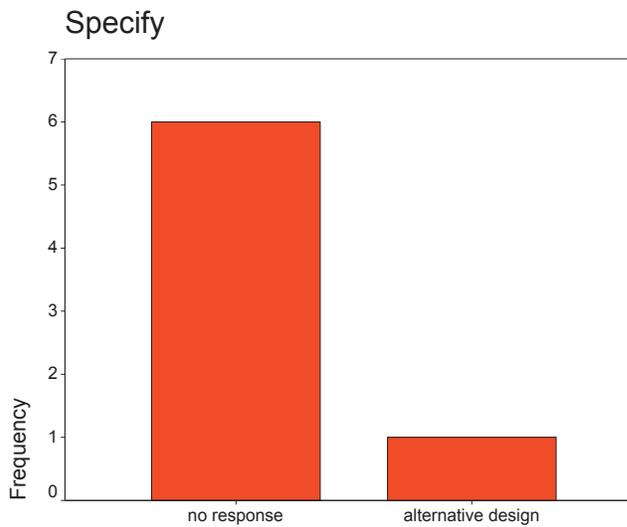
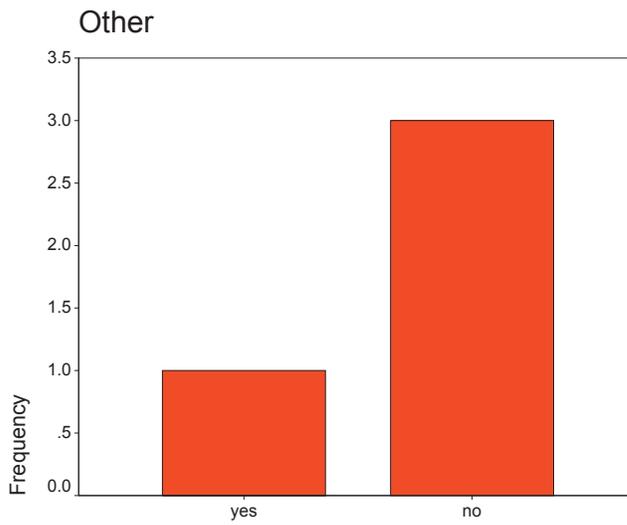
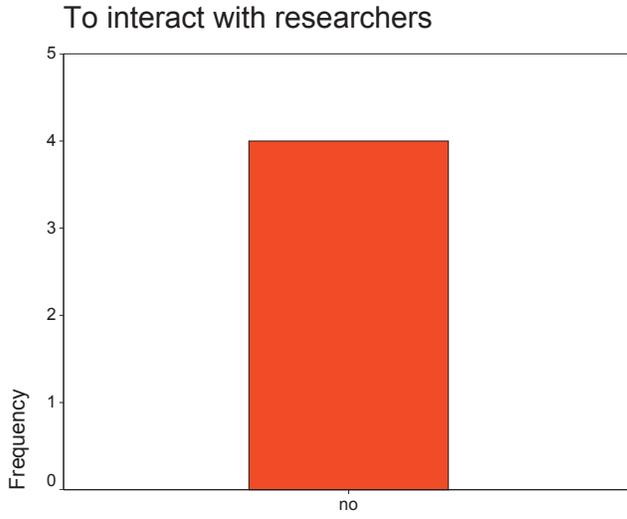


It's part of my job description

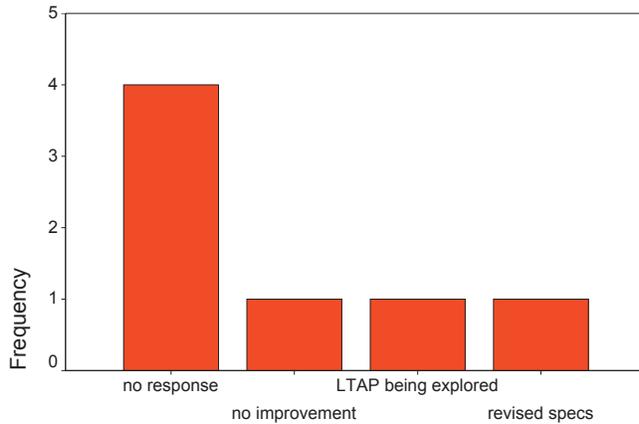


To extend my knowledge in my field





How has your interest improved your job/program effectiveness?



**Q2. Rate the following activities you expect from ODOT's research program by priority.**

**To solve problems for constituents/trouble-shooting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	3	42.9	50.0	50.0
somewhat a priority	3	42.9	50.0	100.0
Total	6	85.7	100.0	
Missing System	1	14.3		
Total	7	100.0		

**To attain national recognition for Ohio and ODOT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not a priority	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

**To serve as a technical resource**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high priority	2	28.6	40.0	40.0
very high priority	3	42.9	60.0	100.0
Total	5	71.4	100.0	
Missing System	2	28.6		
Total	7	100.0		

**To seek out or propose ways to improve ODOT activities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat a priority	2	28.6	40.0	40.0
	high priority	2	28.6	40.0	80.0
	very high priority	1	14.3	20.0	100.0
	Total	5	71.4	100.0	
Missing	System	2	28.6		
Total		7	100.0		

**To compile best practices from peers and other organizations and share**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat a priority	2	28.6	40.0	40.0
	high priority	1	14.3	20.0	60.0
	very high priority	2	28.6	40.0	100.0
	Total	5	71.4	100.0	
Missing	System	2	28.6		
Total		7	100.0		

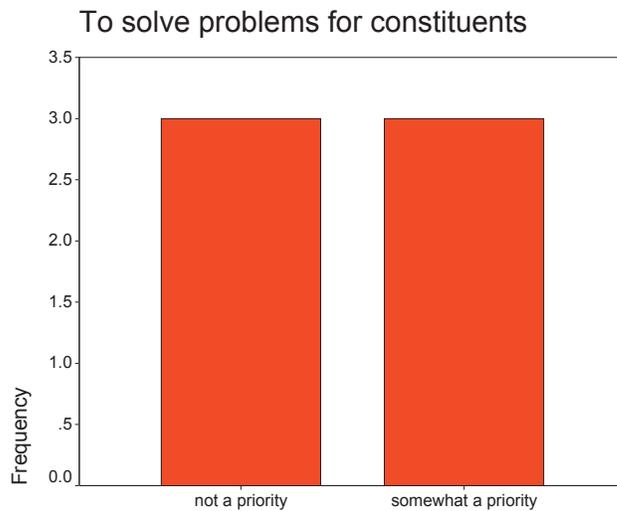
**Other**

		Frequency	Percent
Missing	System	7	100.0

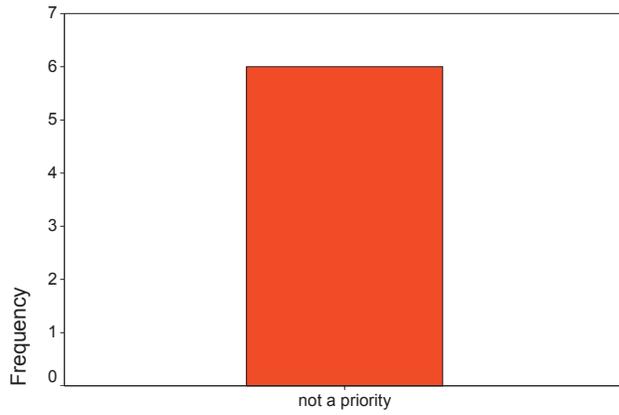
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

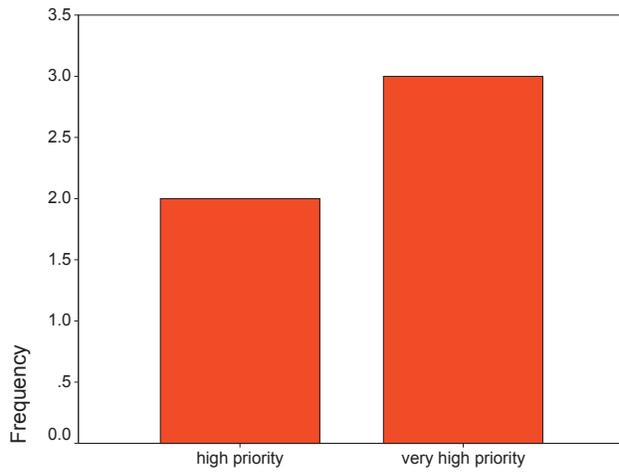
**Rate the following activities you expect from ODOT's research program.**



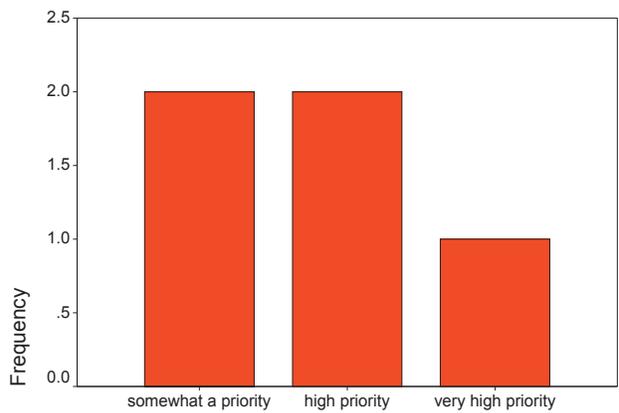
To attain national recognition for Ohio and ODOT



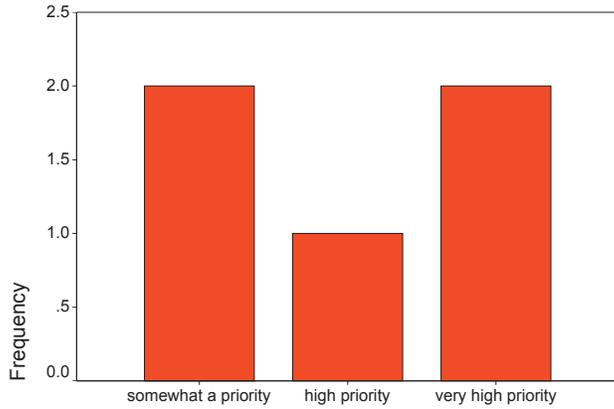
To serve as a technical resource



To seek out or propose ways to improve ODOT activities



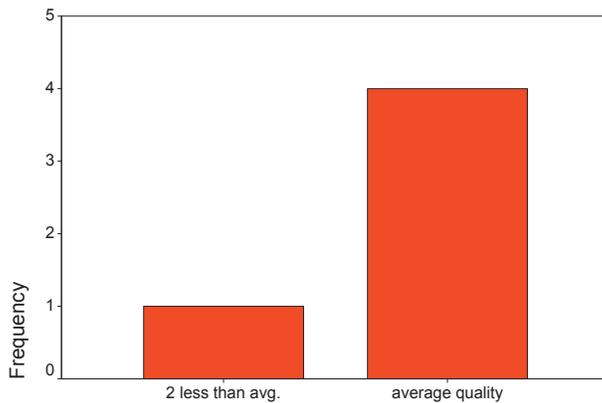
To compile best practices from peers and other organizations and share



**Q3. On a scale of 1 to 5, with 1 representing a low quality program overall and 5 representing a high quality program overall, what is your impression of the quality of ODOT's research program?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than average	1	14.3	20.0	20.0
	average quality	4	57.1	80.0	100.0
	Total	5	71.4	100.0	
Missing	System	2	28.6		
Total		7	100.0		

What is your impression of the quality of ODOT's research program?



**Q4. How do you learn of ODOT research program projects or activities?****Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**DOT Secretary**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	42.9	50.0	50.0
	no	3	42.9	50.0	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Personal e-mails or listservs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Conferences such as OTEC**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	42.9	50.0	50.0
	no	3	42.9	50.0	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	85.7	85.7	85.7
	co. eng. ass.	1	14.3	14.3	100.0
Total		7	100.0	100.0	

**Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	100.0	100.0	100.0

**Colleagues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	85.7	85.7	85.7
	ODOT dist	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**Researchers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

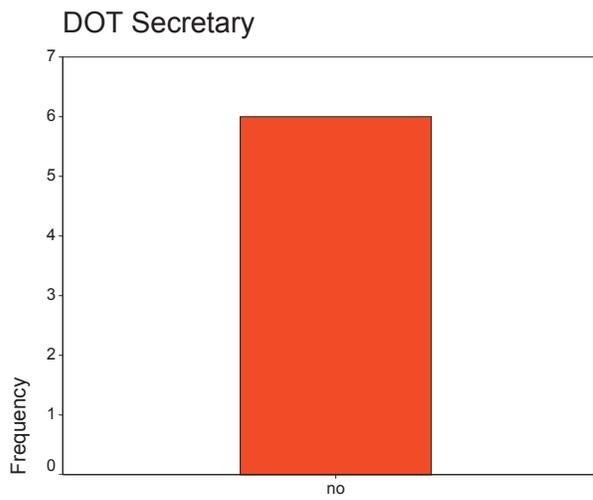
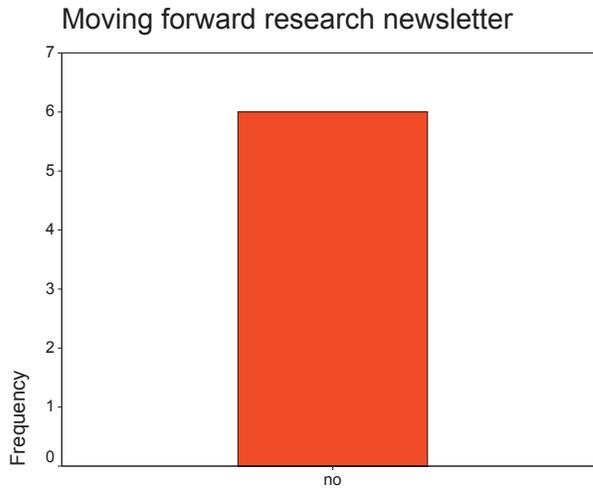
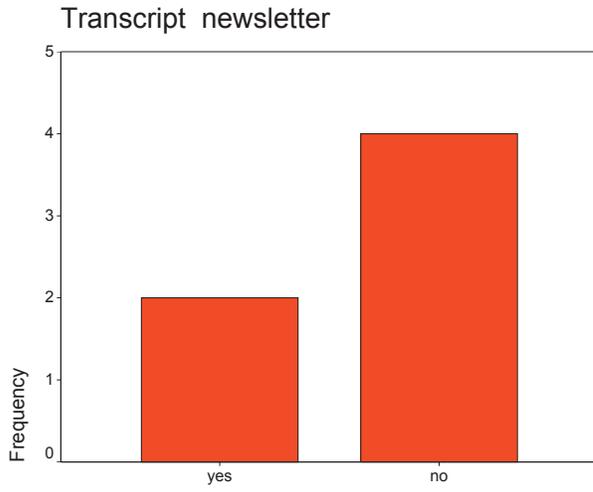
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	100.0	100.0	100.0

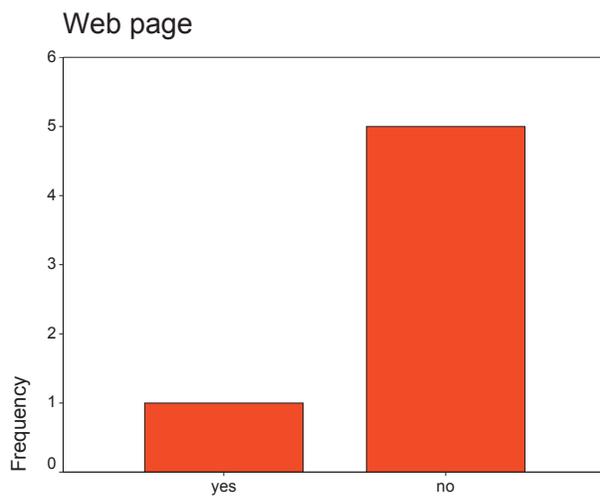
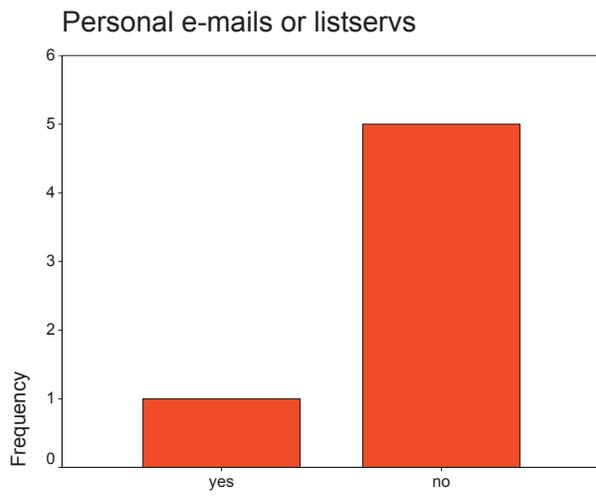
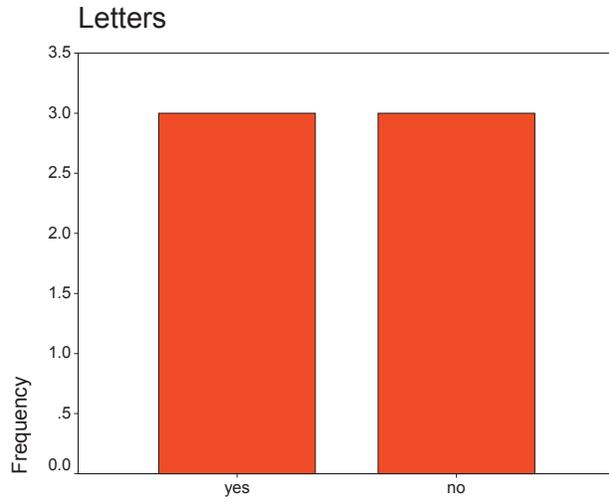
**Other**

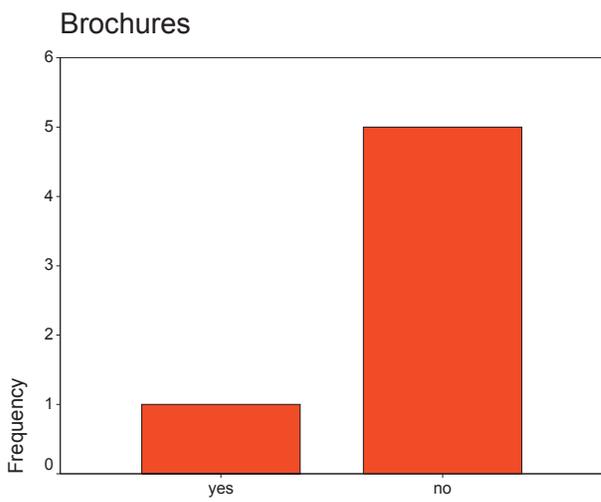
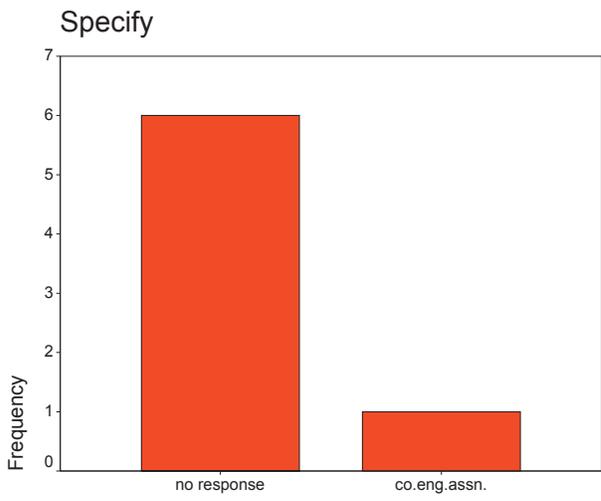
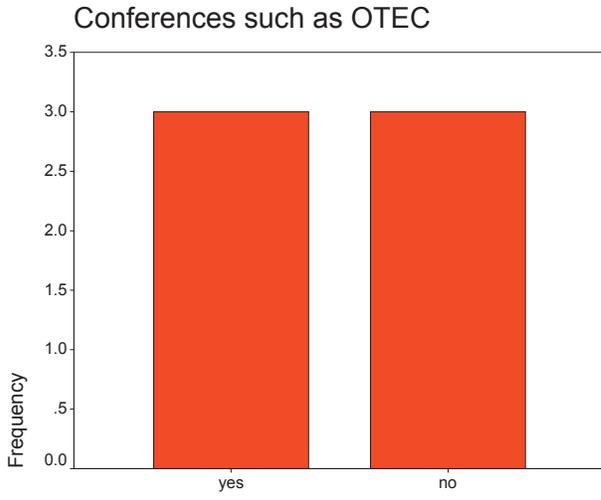
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	71.4	100.0	100.0
Missing	System	2	28.6		
Total		7	100.0		

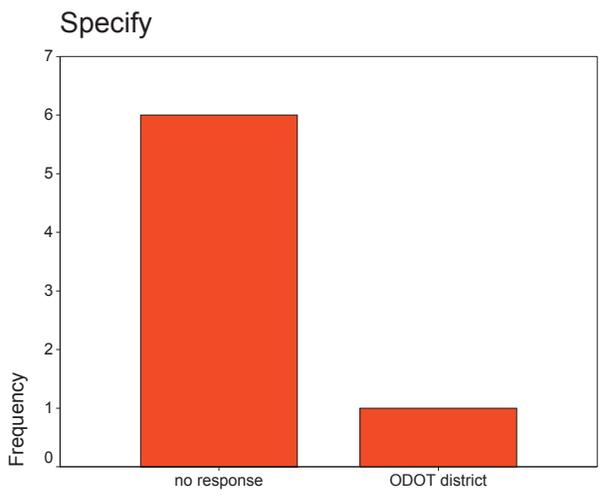
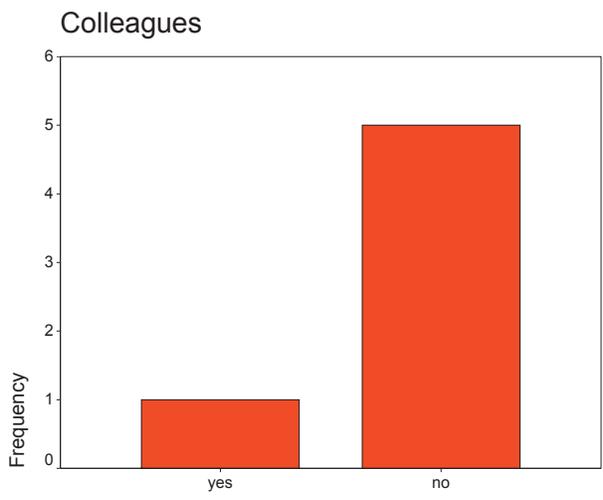
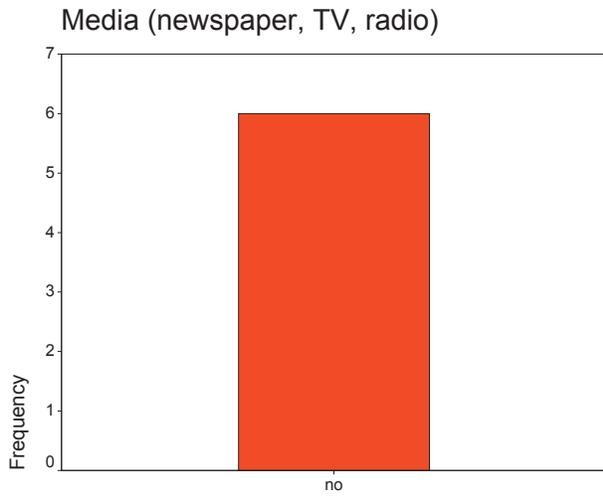
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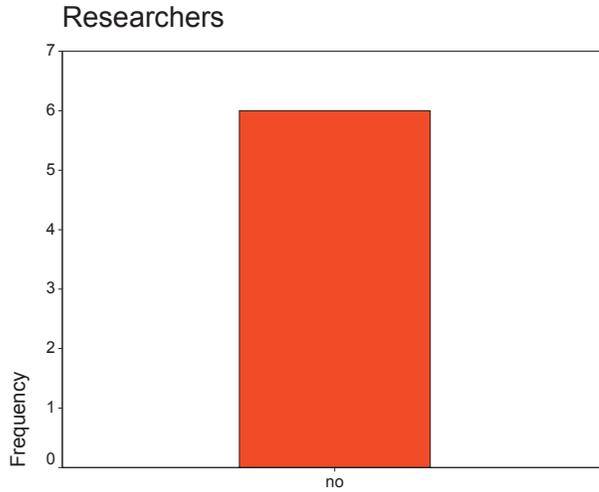
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	85.7	85.7	85.7
	not aware	1	14.3	14.3	100.0
	Total	7	100.0	100.0	







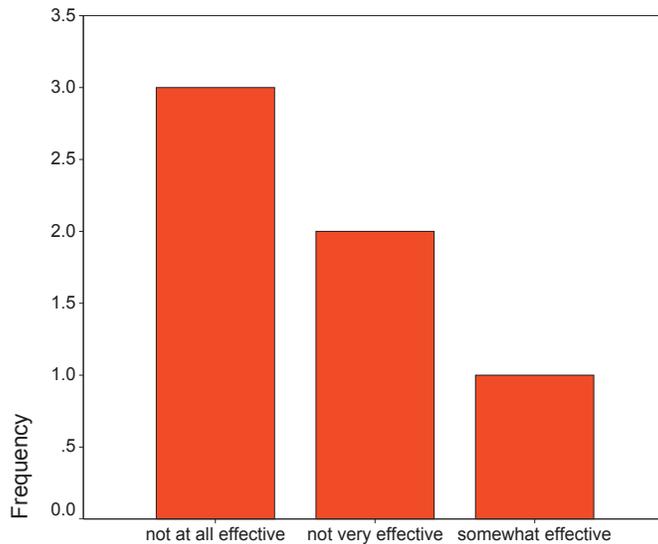




**Q5. On a scale of 1 to 5, with 1 representing not at all effective and 5 representing very effective, what is your impression of ODOT's communication about its research program to county engineers?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all effective	3	42.9	50.0	50.0
	not very effective	2	28.6	33.3	83.3
	somewhat effective	1	14.3	16.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

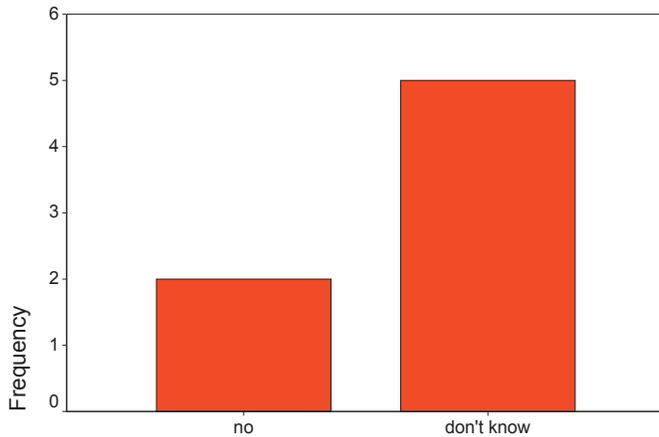
**What is your impression of ODOT's communication about its research program to county engineers?**



**Q6. Do you find the Research Office to be accessible (i.e., easy to contact/reach, responds to inquiries)?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	2	28.6	28.6	28.6
don't know/not applicable	5	71.4	71.4	100.0
Total	7	100.0	100.0	

Do you find the Research Office  
to be accessible?



**Q7. Are you aware of any research program activities that resulted in the following?**

**Personnel cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	7	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Other cost savings**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	7	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Safety improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	14.3	14.3	14.3
no	6	85.7	85.7	100.0
Total	7	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Quality improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	14.3	14.3	14.3
no	6	85.7	85.7	100.0
Total	7	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Better materials**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	1	14.3	14.3	14.3
no	6	85.7	85.7	100.0
Total	7	100.0	100.0	

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Better methods**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	7	100.0	100.0	100.0

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

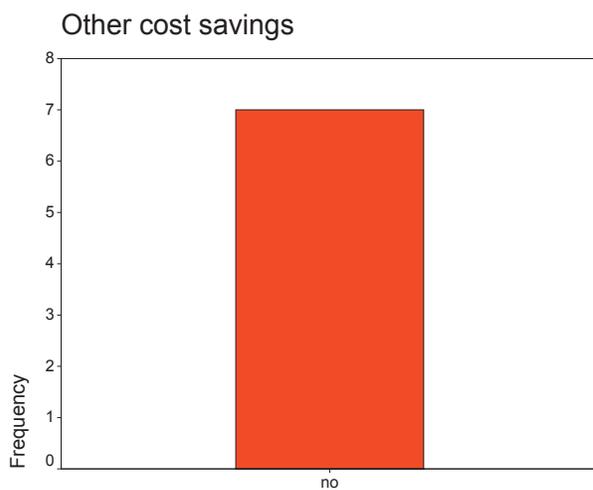
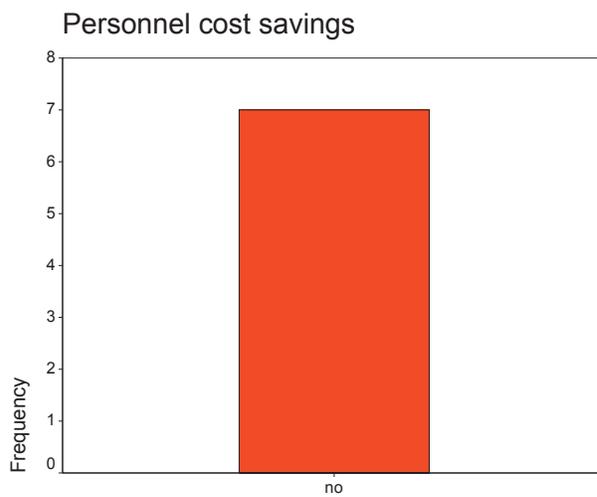
## Other

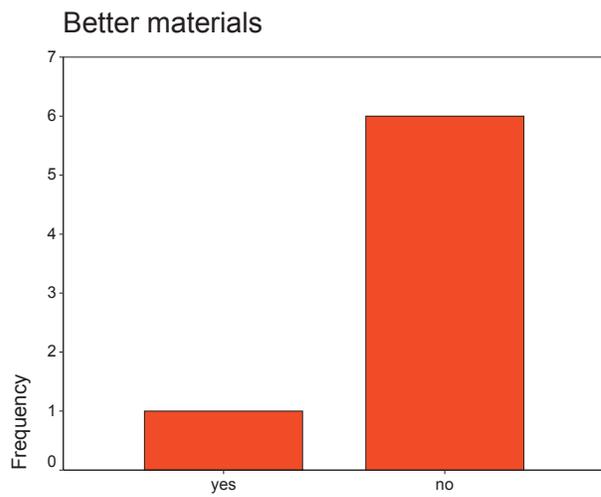
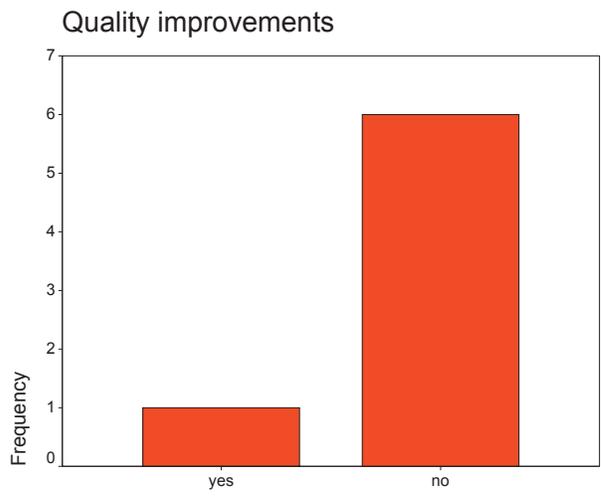
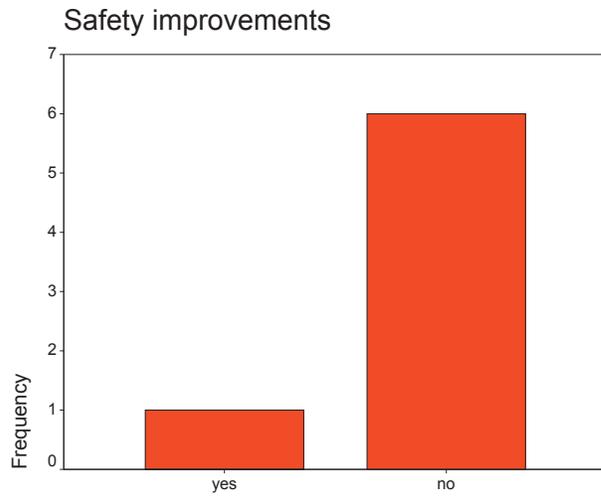
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	7	100.0	100.0	100.0

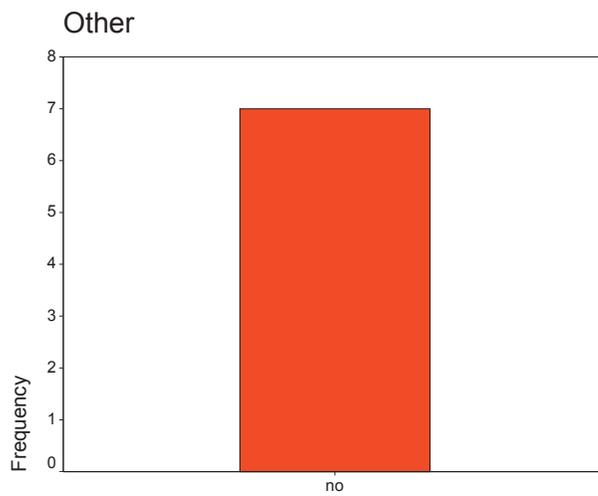
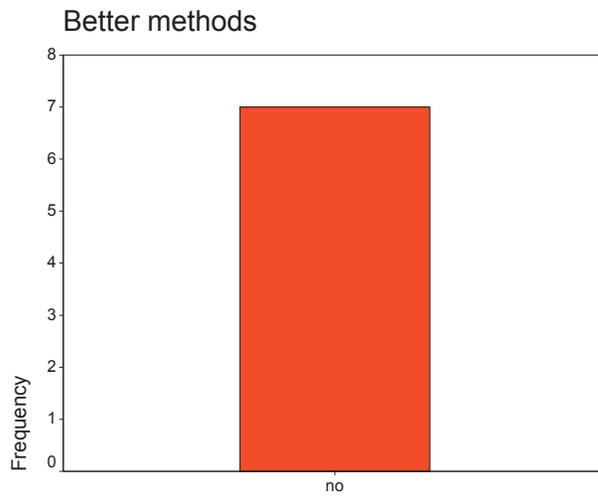
## Specify

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid experimentalproj	6	85.7	85.7	85.7
Total	7	100.0	100.0	100.0

Are you aware of any research activities that resulted in the following?







**Q8. Have you heard of any of the following specific research projects?**

**SHRP Pavement Project on Delaware 23**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	42.9	50.0	50.0
	no	3	42.9	50.0	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

### Ohio Freight Study

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

### Evaluation of Warranty Provisions on ODOT Construction Projects

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	28.6	33.3	33.3
no	4	57.1	66.7	100.0
Total	6	85.7	100.0	
Missing System	1	14.3		
Total	7	100.0		

### Evaluation of Drainable Bases Under Asphalt Pavement

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	28.6	33.3	33.3
no	4	57.1	66.7	100.0
Total	6	85.7	100.0	
Missing System	1	14.3		
Total	7	100.0		

### Development of Crash Reduction Techniques

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

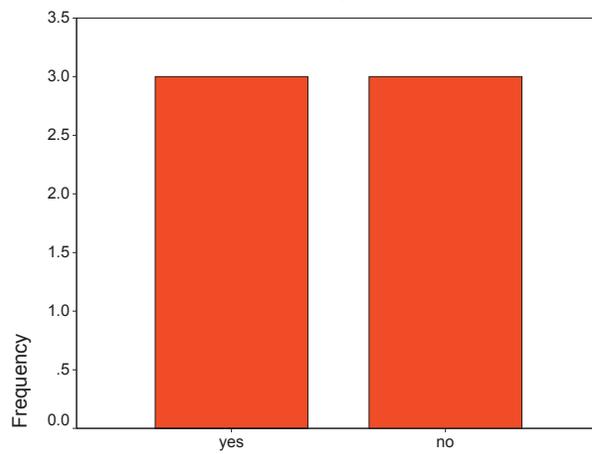
### Innovative Bridge Design Construction Techniques to Expedite Construction

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	2	28.6	33.3	33.3
no	4	57.1	66.7	100.0
Total	6	85.7	100.0	
Missing System	1	14.3		
Total	7	100.0		

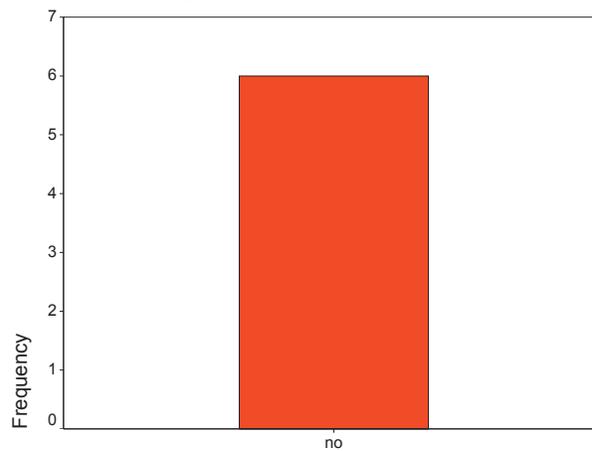
### Comparison/Definition of State DOT's Practices in Pavement Materials Selection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

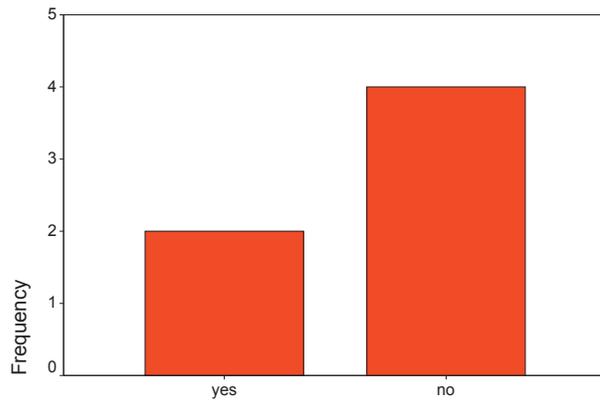
SHRP Pavement Project on Delaware 23



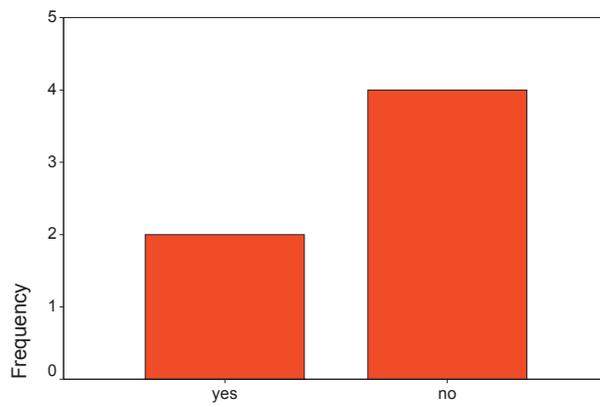
Ohio Freight Study



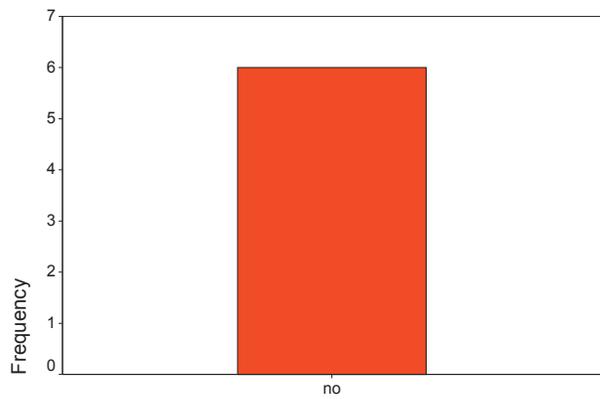
### Evaluation of Warranty Provisions on ODOT Construction Projects



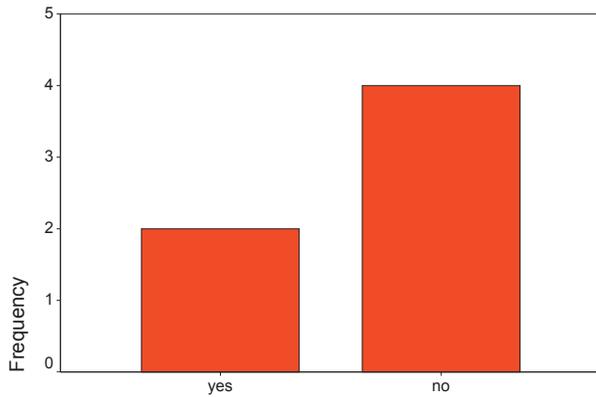
### Evaluation of Drainable Bases Under Asphalt Pavement



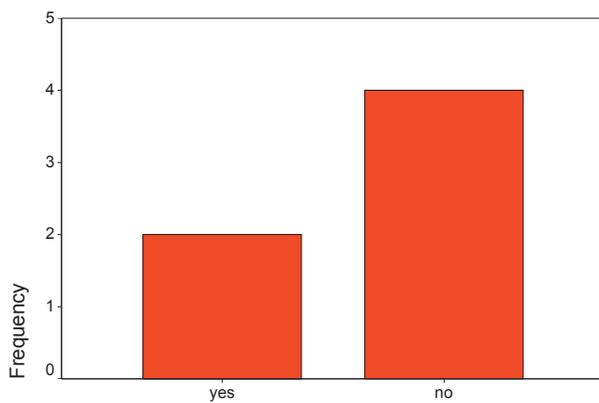
### Development of Crash Reduction Techniques



Innovative Bridge Design Construction  
Techniques to Expedite Construction



Comparison/Definition of State DOT's  
Practices in Pavement Materials Selection



**Q8A. How did you hear of them?**

**Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**DOT Secretary**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

**Letters**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

**Personal e-mail or listserv**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

**Web page**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	6	85.7	100.0	100.0
Missing System	1	14.3		
Total	7	100.0		

**Conferences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	3	42.9	50.0	50.0
Valid no	3	42.9	50.0	100.0
Valid Total	6	85.7	100.0	
Missing System	1	14.3		
Total	7	100.0		

**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	71.4	71.4	71.4
CEAOwinter	1	14.3	14.3	85.7
CEAssn	1	14.3	14.3	100.0
Total	7	100.0	100.0	

**Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Colleague**

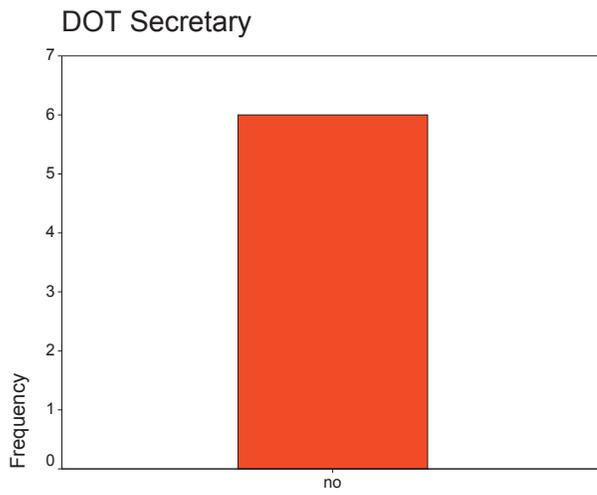
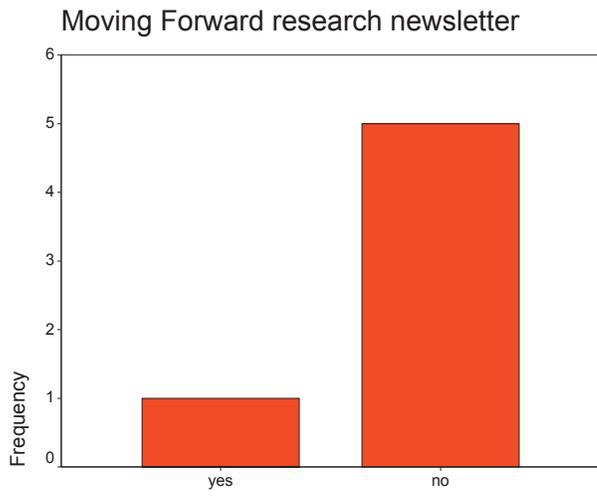
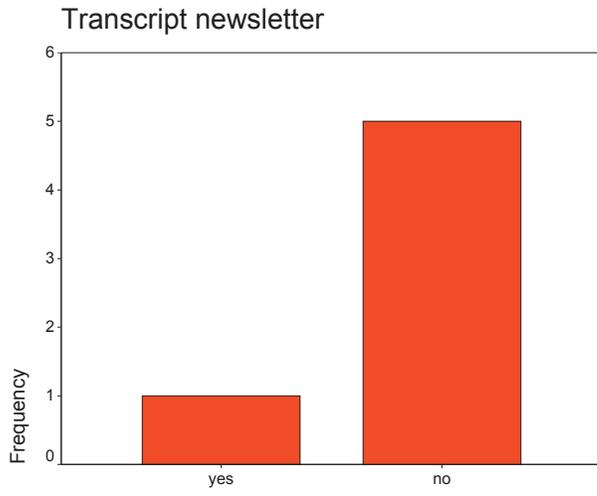
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

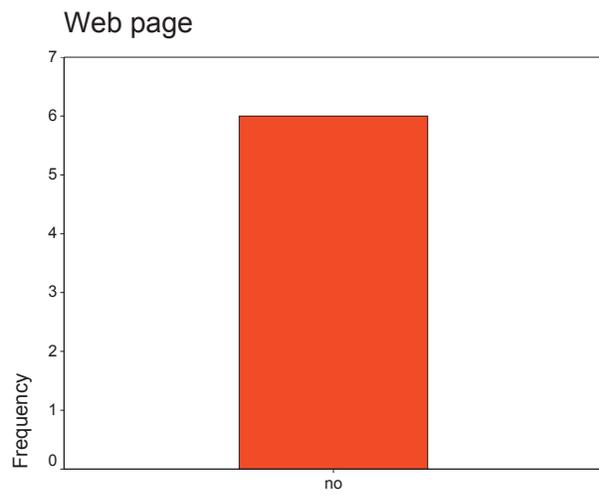
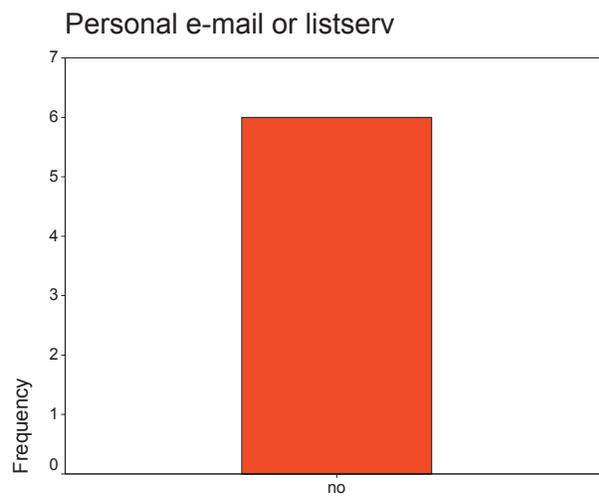
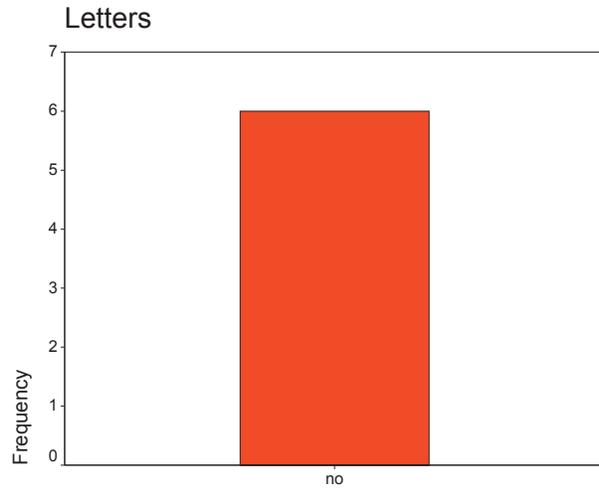
**Other**

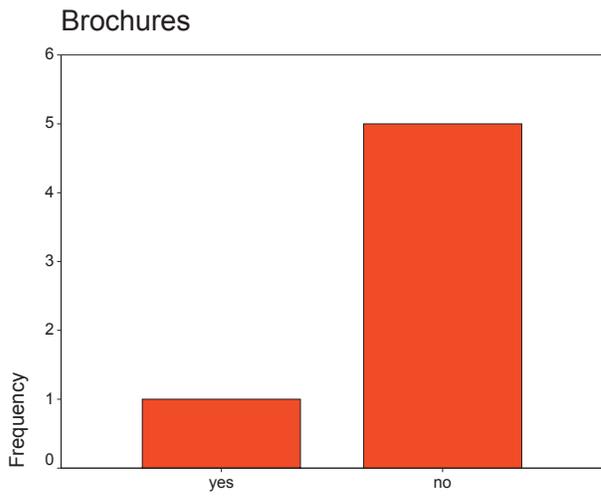
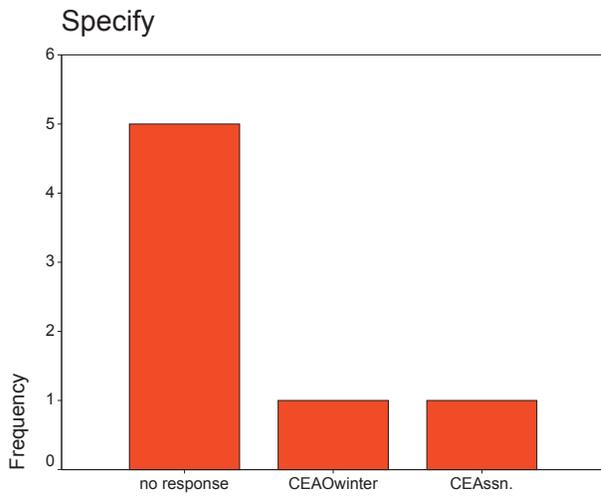
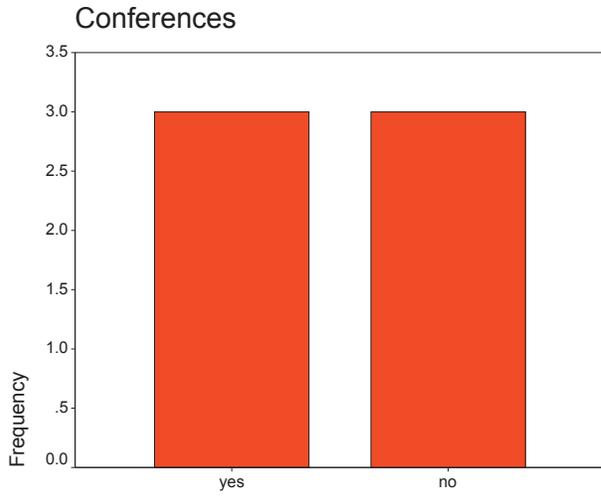
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

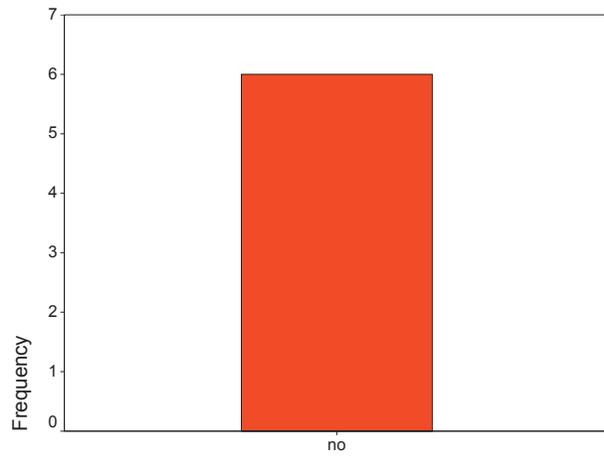
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	85.7	85.7	85.7
	project	1	14.3	14.3	100.0
Total		7	100.0	100.0	



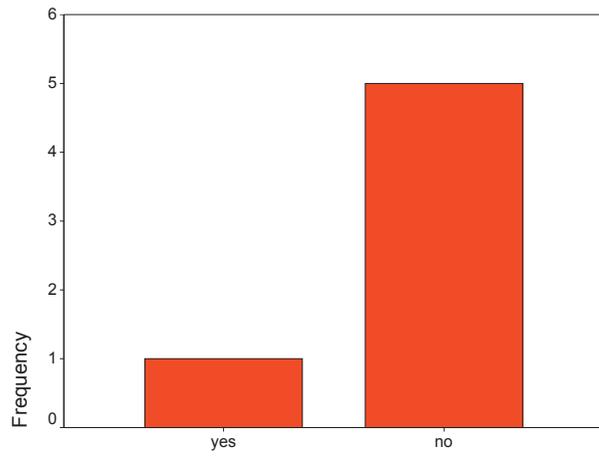




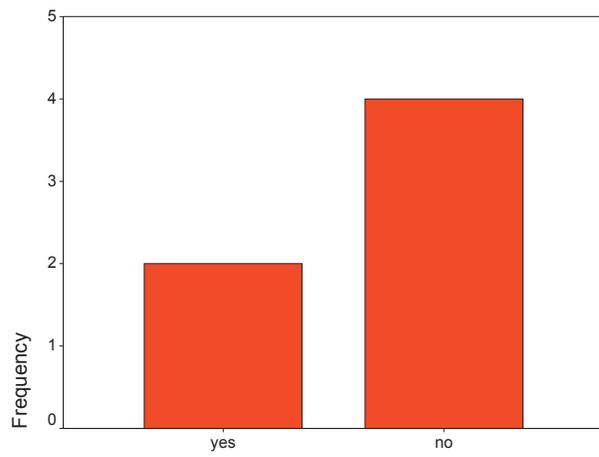
Media (newspaper, TV, radio)

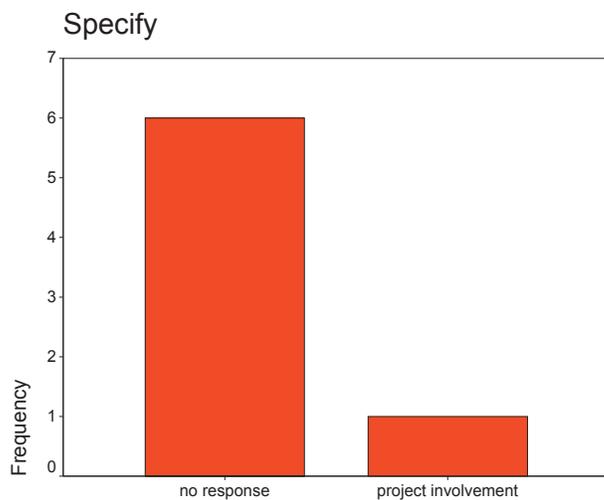


Colleagues



Other





**Q9. What is your preferred source of information?**

**Transcript newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Moving Forward research newsletter**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Letters**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Personal e-mail or listserv**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	2	28.6	33.3	33.3
	no	4	57.1	66.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Web page**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1	14.3	16.7	16.7
	no	5	71.4	83.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Specify**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	OTEC	6	85.7	85.7	85.7
	Total	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**Brochures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Media (newspaper, TV, radio)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Colleagues**

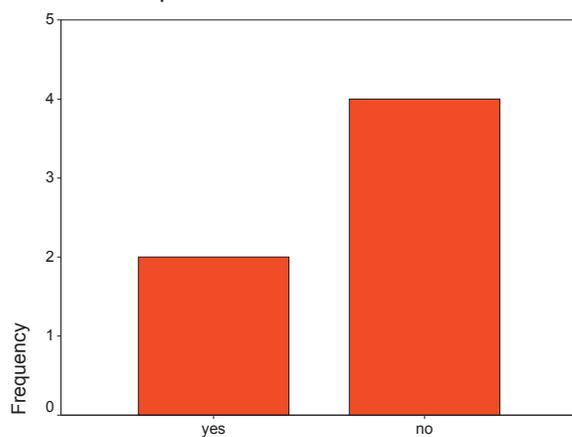
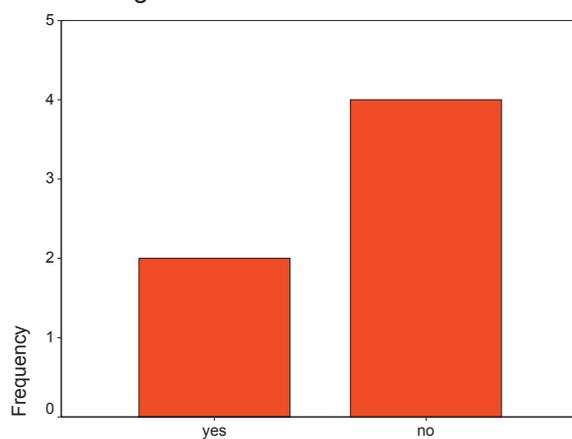
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

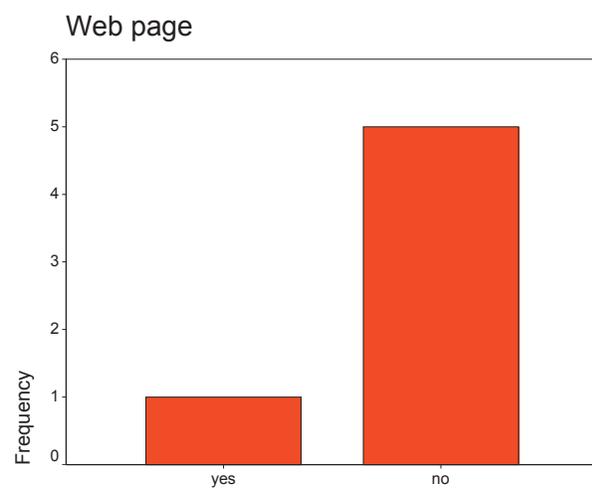
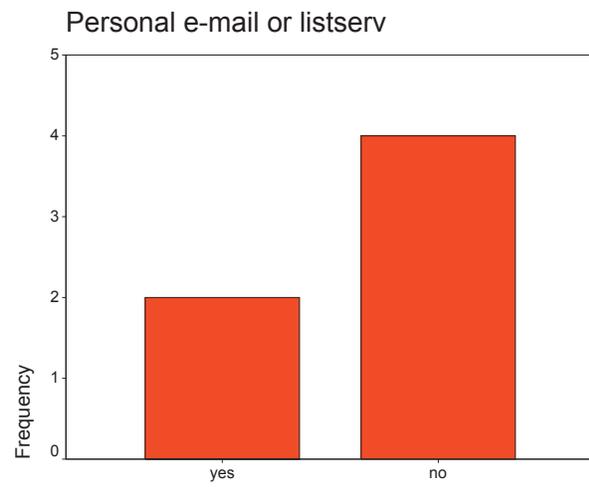
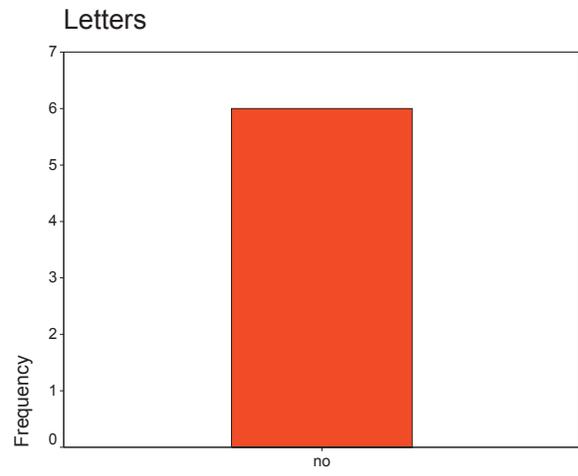
**Other**

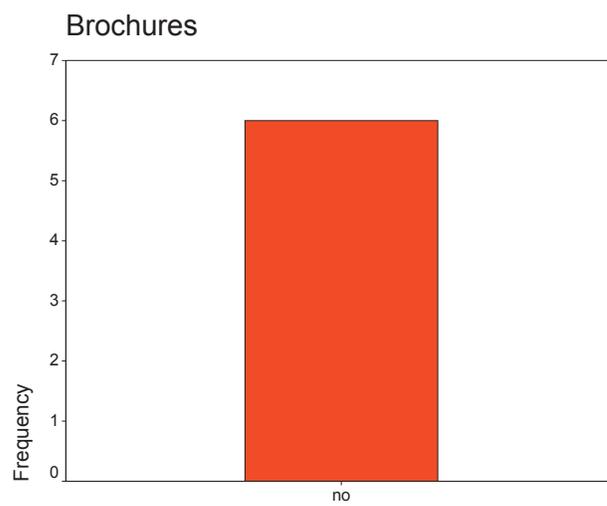
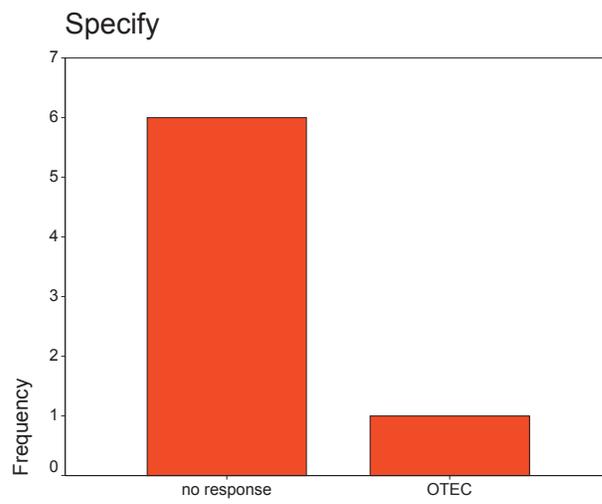
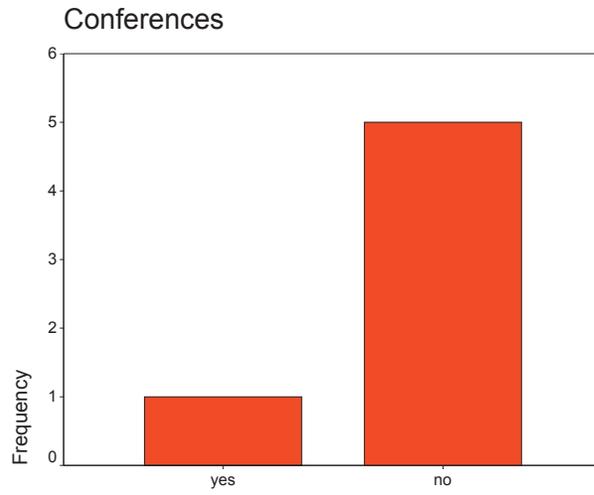
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

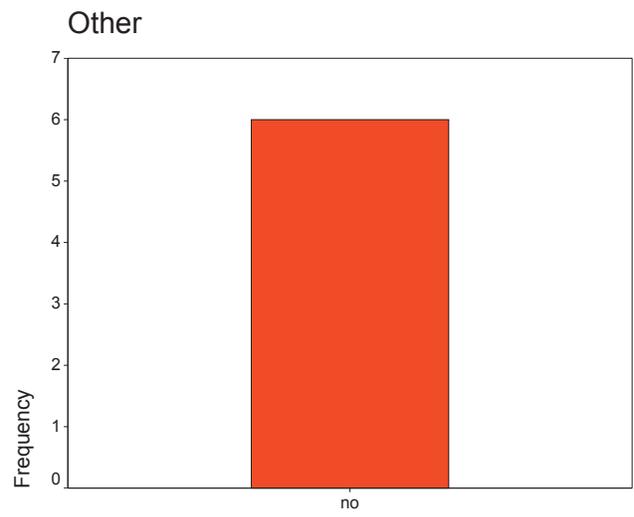
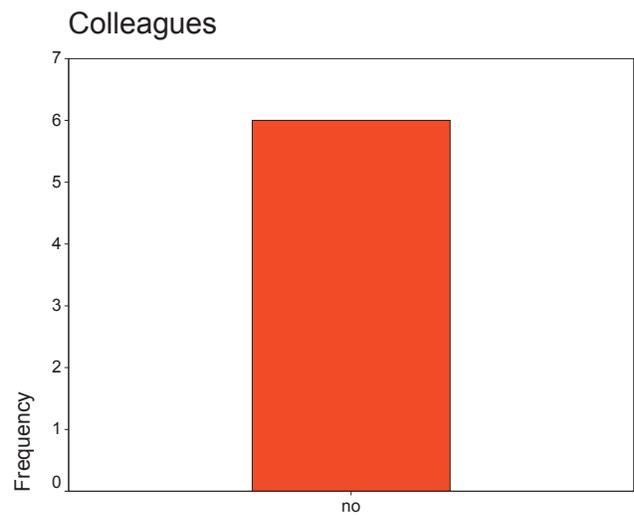
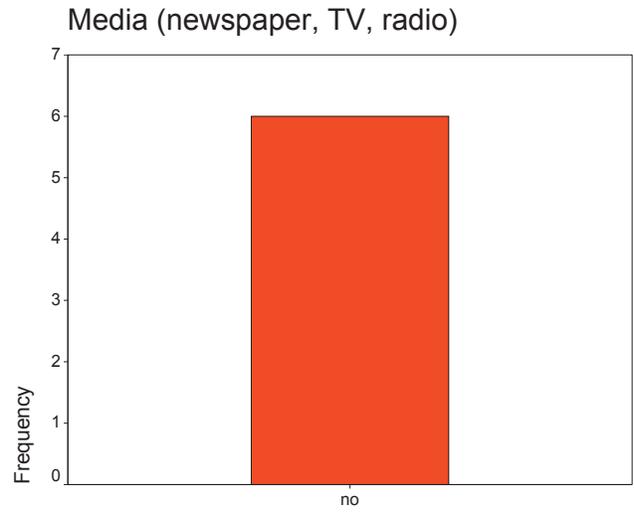
**Specify**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100.0	100.0	100.0

**Transcript newsletter****Moving Forward research newsletter**



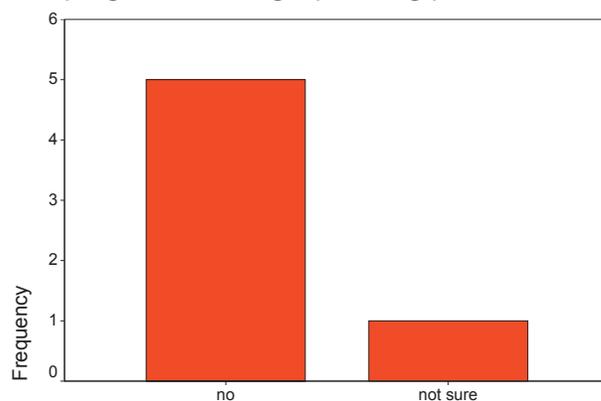




**Q10. Do you feel that you are part of the research program's strategic planning process?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	5	71.4	83.3	83.3
	not sure	1	14.3	16.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

Do you feel that you are part of the research program's strategic planning process?



**Q11. What activities are you most interested in?**

**Requests for Proposals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Ohio's success stories**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Best practices (local, national, etc.)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	5	71.4	83.3	83.3
	no	1	14.3	16.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Technical innovations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	57.1	66.7	66.7
	no	2	28.6	33.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Technology transfer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	42.9	50.0	50.0
	no	3	42.9	50.0	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Research management process**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Strategic research plan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Training opportunities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	5	71.4	83.3	83.3
	no	1	14.3	16.7	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Implementation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**Cost-saving measures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	57.1	66.7	66.7
	no	2	28.6	33.3	100.0
	Total	6	85.7	100.0	
Missing	System	1	14.3		
Total		7	100.0		

**Benchmarking with other states**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	6	85.7	100.0	100.0
Missing	System	1	14.3		
Total		7	100.0		

**What activities are you most interested in?**

